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ABSTRACT

This project investigated whether teachers, committed and trained to teach reading in the content areas at the junior high school level, could improve the reading performance of all their students, particularly Mexican-Americans and blacks. The chapters are organized to reflect the accomplishments in all the objectives of the program. The first chapter summarizes the program and reports on the research conducted. The second chapter reviews the research made prior to the investigation. The third chapter describes the teaching materials found to be beneficial and how they were used. The fourth chapter discusses instructional processes and strategies for teaching reading in the content area. The fifth chapter contains information on the consulting role of the specialists and the dissemination objective of the project. The sixth chapter contains the content reading specialists' evaluation, a report on the project to the Board of Education of Riverside Unified School District, and a summary of an on-site evaluation made by an outside evaluator. The appendixes contain consultant reports, tests used in the project, project literacy reports, lists of references and trade books, and statistical analysis of data. (WR)

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Preparation of Reading Content Specialists for the Junior High School

Teaching Reading in the Content Areas at the Junior High School Level: Strategies for Meeting a Wide Range of Individual Differences in Reading Achievement

Harry Singer
University of California, Riverside

in cooperation with

Riverside Unified School District and San Bernardino Unified School District

Final Report
U. S. Office of Education, OEG-0-70-1732-721
Educational Personnel Development Act Grant
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To

Elizabeth Frances Arnold

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went through the difficult task of interrupting their jobs, moving with their families to homes near the university, returning to the role of students with its rewards of time to learn and reflect, acquire new skills and strategies, but also with its tensions and anxieties, and then entering new teaching situations with responsibilities not only for their own classes but also for disseminating ideas and pioneering a new role as teaching-consultants within their own schools.

Throughout the project, the enthusiasm, warmth, emotional support, insight, and helpfulness provided by our university supervisor smoothed over the stresses and strains in merging the purposes of the University and the School Districts, in developing new teaching styles and roles, and in facilitating the myriad of problems that arise in conducting a program that involves so many people and problems. Therefore, I believe all involved in the project will be as pleased as I that this report is gratefully dedicated to her, Elizabeth Frances Arnold.

Harry Singer
Professor of Education and
Project Director
February, 1973

Introduction

The Content Reading Specialist Program was undertaken for two reasons. For several years, we had been involved in evaluating the effect of desegregation on the reading achievement of Whites, Blacks, and Mexican-Americans in the Riverside Unified School District. Our data indicated that despite desegregation, achievement of minority groups still continued to deviate below the majority group. The Education Personnel Development Act program allowed us to experimentally investigate whether teachers, committed and trained to teach reading in the content areas at the junior high school level, could improve the reading performance of all their students and particularly Mexican-Americans and Blacks. In conducting the program, which included a year of study at the university and a year of teaching representative junior high school classes, we also wanted to identify significant research, materials, and strategies for effectively teaching processes and content to heterogeneous classes of students. If we could develop students who achieved as well in heterogeneous classes as they had achieved in homogeneous or tracked classes, we would have demonstrated that the stigma usually associated with tracking of students was unnecessary.

The chapters in this report are organized to reflect our accomplishment in all the objectives of the program. The first chapter is a summary of the program and a report of the research conducted in it. The second chapter contains the review of the research literature we made prior to our own investigation. The third chapter, prepared by one of our content reading specialists, Sylvia Cherry, with the

help of her husband, Paul Cherry, describes teaching materials we found to be worthwhile and how they were used in our program. The fourth chapter communicates instructional processes and strategies, gleaned from various sources, for teaching reading in the content areas. Ideas were drawn from texts on reading instruction, particularly Harold Herber's Reading in the Content Areas (Prentice-Hall, 1970) and James Moffett's A Student-Centered Language Arts Curriculum K-13 (Houghton Mifflin, 1968). Charles Cooper and Robin McKeown, members of the faculty at the University of California, Riverside, taught courses in secondary reading and curriculum to students in the program. All of the reading content specialists prepared outlines of their instructional programs, kept logs of their teaching strategies and consultations with other teachers during their experimental teaching year, and made videotapes of their instruction. Towards the end of the year, as part of the dissemination objective of the program, teachers from surrounding school districts participated in a course on secondary reading in which they contributed their techniques, materials, and strategies for teaching reading in the content areas. Reading specialists and consultants including Harold Herber, James Moffett, Charles Cooper, and Robert Ruddell, served as speakers and consultants in this course. Ideas from all of these sources are summarized in Chapter Four.

The fifth chapter contains information on the consulting role of the specialists and the dissemination objective of the project. Content Reading Specialists consulted throughout their teaching year. Verdun Trione, University of Nevada, helped in teaching specialists how to consult with teachers.

The last chapter contains the Content Reading Specialists' evaluations, a report on the project to the Board of Education of Riverside Unified School District and a summary of an on-site evaluation made by our outside evaluator, Robert Ruddell, which consists of his discussion with a principal, content reading specialist, and teacher at each of our junior high schools.

The appendices contain consultant reports, tests used in the project, project literacy reports, lists of references and trade books, and statistical analysis of data.

In summary, what did we accomplish? Although we did not significantly improve the reading achievement of our experimental group as compared with our control group, we did demonstrate that we could successfully conduct instruction in heterogeneous classes. We now have a catalogue of teacher-evaluated material. We have workable procedures and strategies for teaching both process and content in various curricular areas. As a result of the seed money provided by this project, we have established in our university library a section of curriculum materials used in our project, and in our School of Education we have a program for preparing teachers to teach reading in content areas and a procedure for developing content reading specialists.

Chapter One

The University of California, Riverside Reading Project: Reading Content Specialists for the Junior High School Level[1,2]

Junior high school teachers have long recognized that reading disabilities can -- and usually do -- impair a student's learning in the content area. Unfortunately, recognition of the problem implies something considerably short of a solution. The junior high school in California is an "in-between" administrative unit and enrolls students who are at an "in-between" stage of development. Teachers are not specifically prepared to instruct this age level, which is highly varied in ability and achievement, undergoing rapid physical and physiological changes associated with puberty, and beginning to search for and establish identities, vocational goals, heterosexual relationships, and greater independence from family, yet needing and wanting emotional support and well-defined boundaries of behavior.

Despite the complexities of teaching and the educational needs of students at the junior high school level, there is no teaching credential specifically required for the junior high school level. Under the present Education Code in California, the elementary and secondary credentials completely overlap at the junior high school and in this overlap teachers

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[1]A joint project of the University of California, Riverside and the Riverside and San Bernardino Unified School Districts. This project was supported by the U.S. Office of Education's ESEA Program. Project Officer: Miss Helen O'Leary.

[2]This summary of the project was presented at the National Reading Conference's Annual Convention, Tampa, Florida, December, 1971, and will be published in the Twenty First Yearbook of the National Reading Conference, Frank Greene (Editor), 1972.

are authorized to teach in the junior high schools. The elementary credential's authorization is from grades K-9 and the secondary credential from 7-12. Actually, most junior high school teachers in the 20,000 square mile area of Riverside and San Bernardino Counties served by the University of California, Riverside hold secondary credentials. This means that very few, if any, of these teachers have had any preparation in teaching reading, either developmental, remedial, or reading in the content areas. Yet it is well known that the achievement range of junior high pupils is quite wide. Indeed, a typical class of seventh graders has a range of achievement in reading extending from the third to the eleventh grade, with approximately half of the students achieving above and the other half below median grade level (Bond and Tinker, 1967).

A large percentage of students who are achieving below grade level are minority students. As shown by the graph on the following page, taken from the Riverside School Study (Singer, 1970), there is an increasing grade-equivalent disparity in the reading achievement of Negro and Mexican-American ethnic groups compared with the Anglo majority at successive grade levels. By the sixth grade, the discrepancy is about two grade level equivalents.

While the causes for these discrepancies are multiple, including bilingual and dialectical handicaps (Bailey, 1966), preschool preparation (Bereiter and Engelmann, 1966), normalization of instructional expectations in de-facto segregated schools (Wilson, 1963), among other factors, there is some probability that at the junior high school level the initial causes for some of these deficiencies are no longer present (Singer, 1956).

TRENDS IN GENERAL ACADEMIC ABILITIES FOR ANALYTIC GROUPS 1-4
IN GRADES 1-6

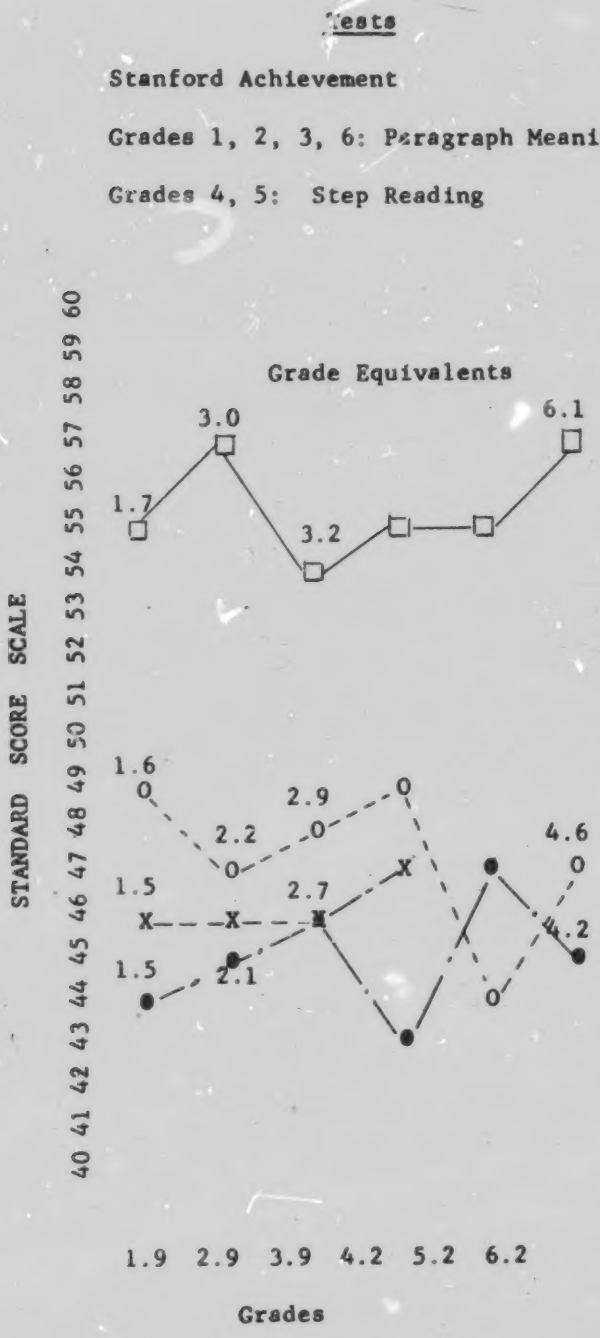

Fig. 1. Reading Comprehension. Mean Standard and Equivalent Scores. Uppermost line represents reading achievement of the Anglo group and the lower lines the ethnic groups (Negroes and Mexican-Americans).

However, the discrepancies are likely to increase during the junior high school years rather than be ameliorated for several reasons, including tracking practices at the junior high school level (Balow, 1964) and the inadequate preparation of teachers at this level for overcoming the deficiencies.

Instead of de-facto integration alleviating the problem, there are some possibilities of its exacerbating the discrepancy. In their report, Singer and Hendrick (1967) state the problem thusly:

> The integration plan in Riverside can be conceptualized as an experimental alternative to the deleterious effects of segregated education. For example, a particularly pertinent study reported by Alan Wilson in 1963 revealed that because teachers tend to normalize or base grading standards upon the average of one particular group taught, minority children in de-facto segregated elementary schools receive grades higher than their standardized test scores would suggest they should, while the converse is characteristic of educationally advantaged children. When both groups are brought together in integrated junior and senior high schools, grading standards may still be normalized, but, owing to the more representative range of achievement scores in the combined groups, assigned grades would then more closely approximate test scores. Consequently, on the average, relatively lower grades would probably be assigned to the minority children and higher grades to majority children. This change in relative rank in achievement and the apparent discontinuity in assigned grades in consonance with other factors could result in the minority children from de-facto segregated schools experiencing a negative cycle of lowered grades, a more competitive and unhappy environemnt, lowered morale and motivation to learn, and subsequent reduction in achievement. It would, therefore, not be surprising to find that these children and their parents would conclude not only that their elementary schools were inferior, but that education in junior and senior high schools is both inappropriate and not responsive to their needs. Tracking systems at junior and senior high schools which use differentiated curricula can only compound the problem because they tend to increase the disparity in achievement among children in the various tracks.

While the causes for students dropping out of school are also complex and multiple, one of them is frustration experienced by students who are intelligent but whose achievements are far below their capability level. At the present time in Riverside some students tend to drop out in the

eleventh grade when school attendance is no longer compulsory because their achievement deficiencies, particularly in reading, are embarrassing to them. Therefore, one instructional need is preparation of teachers for the junior high school and specifically for teaching minority children who have recently been de-facto integrated.

A second instructional need at the junior high level is teaching students to read in such content areas as science, history, and social studies. At the present time, students are expected to transfer skills acquired in elementary school in developmental reading, based on literary content, to all the other content areas. While there are some communalities, there are specific differences in the content areas that can and should be taught. For example, students need to learn how to read and interpret charts, maps, graphs, and tables. They need to learn various types of reading, such as reference and critical reading (Gans, 1940). They need to be aware of various patterns of writing such as problem-solution, cause and effect, question and answer, inductive and deductive, and a specific technical vocabulary, know available reference works, and learn different reading techniques, such as analytical techniques for critical reading and skimming techniques for overviews. They also need to develop a variety of rates and learn to use them appropriately. Thus, reading in the content areas includes knowledge of technical vocabulary, interpretation of data, unique patterns of mental organization required to read the printed materials in each content field, devices, symbols, illustrations, and specialized purposes, motives, and attitudes, which do not usually occur in tests of general reading ability (Russell and Fea, 1963; Smith, 1965; Moore, 1969; Singer, 1969). Since secondary credential

requirements do not include any specific instruction in teaching any type of reading in any content area, most junior high school teachers need such instruction and it is likely that such preparation will probably be reflected in pupil achievement in the content areas.

To teach reading in the content areas to students whose achievement covers an eight to ten year range requires not only knowledge of the psychology and pedagogy of reading, but also more advanced knowledge than the typical teacher possesses of the structure of subject matter in the various content areas (Bruner, 1963). Consequently, half of the graduate work in the program consisted of work taken in an ancillary field, e.g., history, English, psychology. Such knowledge should enable the teacher to restructure the content of the curriculum and identify appropriate instructional objectives, diagnose content deficiencies, and select specific material for remedying gaps in students' knowledge (Gagné, 1966) and for promoting greater teaching efficiency and effectiveness. Graduates of the program should therefore be able to provide leadership in the public schools in the evaluation and reorganization of curriculum and improvement of teaching and learning in the subject fields.[1] They should also be able to bring together and relate the content and methods of ancillary fields to the problems of human learning in the context of the school.

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[1]Decentralization of the administrative structure, occurring in Riverside as well as elsewhere, requires more qualified teachers in the schools to fulfill functions formerly conducted by central administration consultants and supervisors.

Project Program

The project consisted of a two year program. The first year involved concentrated study at the University with field work experience in nearby junior high schools. The second year of the program was an intern type of experience in junior high schools, two in Riverside and two in San Bernardino Unified School Districts.

During the first year, students took approximately five courses in Education and five courses in an ancillary department. The following were the required courses in Education: Literature and Reading in the Secondary Schools; Theory, Diagnosis and Treatment of Reading Difficulties; Curriculum and Instruction; Review of Research in Literature in Education; and Seminar in Sociology of Education. In the ancillary departments, candidates had choices to fit their interests and academic backgrounds. Because of self-selection, screening, and final selection criteria, eight candidates were in English, two in history, one in psychology, and one in Spanish. The candidates ranged in age from 23 to 50, nine were female and three male, ten were from California and one from Minnesota and one from Pennsylvania. The range in teaching experience was from two to nine years. Two candidates were teaching at the elementary level and the other ten were at the junior or senior high school level when they entered the program.

Specific Objectives of the Program

1. To improve the reading achievement of junior high students, particularly those who are educationally disadvantaged. The intent was to attain statistical convergence in the achievement of Anglo and ethnic minority groups and, in general, to improve the average level of reading achievement in the junior high school.

2. To prepare reading specialists for the junior high school. These specialists were to learn to diagnose and remedy reading difficulties through course work and a year-long internship under supervision.

3. To spread the effects of the reading specialist to all teachers in the junior high school through consultative and in-service training in teaching reading in the content areas. The purpose of the consultation with individual teachers was to ameliorate the reading abilities of students, and to have the classroom teacher become aware of reading difficulties in the content areas and ways of overcoming such difficulties. The teacher could then incorporate such knowledge into classroom practices that would be beneficial to all students in the class.

4. To improve the junior high school curriculum. The program presumed that improved competence in the subject field would increase the teacher's awareness of instructional options while he was engaged in the process of curriculum decision-making. Thus the course work in a specific content area was intended to work as a vehicle for helping the teacher improve the curriculum in his field.

5. To develop model classrooms in the junior high school. It was expected that each of the content reading specialists would develop a model classroom for the improvement of reading in his respective content areas, e.g., science, social studies, English, etc. Development of these classrooms was viewed as a central objective of the entire project.

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[1]The effects of the program were also spread through the use of video-tapes presented to local groups, a University Extension course entitled "Project Literacy," a two-day symposium conducted in cooperation with Professor Harold Herber and his Syracuse Reading Project at the International Reading Association's Annual Convention held in 1971 in Atlantic City, and a symposium presented at the 1971 Annual Conference of the California Reading Association held in San Francisco--Sylvia Cherry, one of the teaching fellows in the project participated in this presentation.

Junior High Schools

The four junior high schools were in Riverside (two) and San Bernardino (two). Principals had volunteered their schools. In San Bernardino the program was installed in two brand new schools.

A one day conference of department chairman in science, social studies, mathematics, and English, and principals of the four schools was called in May of the first year. Dr. Harold Herber, Syracuse University, taught the participants the use of reading and reasoning guides and showed films of their use in the classroom. In the afternoon, the Content Reading Specialists served as consultants to each content group in the art of constructing reading and reasoning guides to accompany textbook assignments and teach students processes and content in the assigned material. This conference set the stage for the second year when the Content Reading Specialists would serve as teachers and teacher-consultants in schools represented at the Conference. It also initiated and gave confidence to the Content Reading Specialists in their roles as consultants.

General Procedures

Four major approaches were used in teaching reading in the content areas to heterogeneous classes of seventh graders and a few classes of eighth graders. These approaches were (1) the project or theme method of teaching a unit, e.g., the Scholastic Magazines type of units of "Courage" is an example of the project method; (2) Herber's reading and reasoning guides (Herber, 1968) were emphasized in each content area with an extension made by our program to include word recognition and word meaning instruction; (3) Moffett's (1968) techniques were stressed in English classes: group discussion, reading taught through writing activities, journals were kept, paperbacks were used in self-selection and free reading

time, role playing and class plays were also utilized, and (4) cross ability teaching was employed, sometimes in group settings and other times in one-to-one relationships.

The Content Reading Specialists also spent one-third of their day consulting with other teachers. This consultation varied from teaching the use of study guides, to working with small groups, to working with and demonstrating reading instruction in the content areas to an entire class and its teacher. To encourage teachers to consult and to provide the means for curriculum modification, each junior high school was given $2500 for purchase of materials and supplies. Purchase decisions were to grow out of consultation between teachers and the Reading Content Specialists. The success of this feature of the project was attested to by the incoming president of the San Bernardino teaching association who had consulted extensively and was committed to spreading the effects of the program throughout San Bernardino.[1,2]

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[1]The leadership objective of the program was also realized, for upon completion of the project half the graduates immediately gained positions related to their training and experience. Anthony Bechtold became a reading consultant in Poway School District, Poway, California; Richard Zimmerman is now a reading specialist at Moreno Valley High School, Sunnymead, California; Christina Guitierrez and Jean Fruehan became chairman of their respective social studies and English departments in Riverside and San Bernardino junior high schools; Margaret Minor was employed in a newly created position as the reading consultant in the Riverside junior high school where she had previously taught. Bonnie Bauman returned to her high school and Vaughan Hudson continued on in her junior high as an English teacher. Dale Johnson and David Kahl, on sabbatical leave from their high schools in Oceanside, California and Erie, Pennsylvania, respectively, had to return to them. Patsy Miller took the year off from teaching. Sylvia Cherry accepted a position as part-time member of the University of California, Riverside's supervisory staff in teacher education and part-time teacher in the junior high school in Riverside where she had taught before entering the program.

[2]These materials are now housed in the University's library where they are available for loan to any teacher in the University's service area.

Data

Data were gathered in the Content Specialists' classes and in control group classes. The control group classes consisted of teachers who volunteered to have their classes tested in the fall and retested eight months later in May. It was not feasible to use the most defensible design of random assignment of students to experimental and control group treatment.

Three test batteries were used: (1) California Reading Achievement Test, Junior High School Level, Forms W and X,[1] (2) Carter's California Study Methods Test,[2] and (3) Athey-Holmes Reading Personality Scale (1969).

Results

Analysis of covariance comparisons were made of (1) Experimental vs. Control Groups by total, by school, by teacher, and by ethnic group on reading, study methods, and personality. The results were not statistically significant.

Next a design was used based upon the attitudes of the Content Reading Specialists towards teaching reading in the content areas (Otto, 1969). Although the group had a narrow range of attitudes, the range nevertheless varied from 51 to 65.[3] Dividing this range into half, the top and bottom halves were compared against the upper and lower 27 percent of each

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[1,2]These tests are published by the California Test Bureau. Monterey, California: McGraw-Hill.

[3]According to the norms for a group of 38 junior high teachers, the mean was 41.9 and standard deviation 9.39 (Otto, 1969).

of the ethnic groups. The result of this analysis of covariance test was also not statistically significant.[1]

Discussion

While the results were statistically insignificant, the project did succeed in demonstrating that it was possible to teach a heterogeneous class of junior high school pupils where teachers had been used to tracking students. The consequence of this heterogeneous grouping in a school district consisting of about six percent Black, 12 percent Chicano, and 82 percent Anglo students showed no loss in reading achievement. Of course, it was disappointing that we had not at least bent the Anglo majority vs. Black and Chicano minority curves of achievement. We can only speculate that perhaps a longer period of teaching than one year is necessary to make a significant impact on group means and to overcome the deleterious effects of previous years of growing discrepancies in majority and minority group achievement.

Further and more massive attempts, reaching down into the elementary school and extending up into the high school, may be necessary to effect a change in group differences in achievement. If schools are to carry out the 1954 Supreme Court definition of equality of educational opportunity, then more differentiated input is required. As interpreted by Coleman (1968), the criterion for equality of educational opportunity was shifted by the Supreme Court's decision from equal input to equal output.

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[1]Appreciation is expressed to my statistical research assistant, Sherrel Beasley Haight, for processing these data and to my research assistant, Grace Van Doren, for coordinating the collection of the data, and to Marka Adams for typing this chapter.

In effect, the concept under which the education of exceptional children has long operated has been generalized by the Supreme Court to include minority groups. For moral, legal, political, and educational reasons, school districts such as Riverside terminated de-facto segregation some six years ago and active attempts have been made and are still being made by various agencies, including federally funded programs such as the present one, for the investigation and amelioration of the achievement and adjustment of minority children, yet the evidence indicates that inequalities in achievement between majority and minority groups still remain (Singer and Hendrick, 1967; Singer, 1970). Thus, some 17 years since the concept of equality of educational opportunity has undergone its revolutionary change, its attainment continues to challenge our imagination and ingenuity to transform into reality a dream of a promised land.

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Chapter Two

Factors Involved in General Reading Ability and Reading in the Content Areas

This review of research on factors involved in general reading ability and reading in the content areas is divided into two parts.[1] The first part organizes research on general reading ability into a developmental frame of reference. The second part reviews research on reading in the content areas.[2]

In this review, we are trying to answer the following questions: (1) What factors are involved in general reading ability and reading in the content areas? (2) What developmental changes occur in these factors? (3) What is the relationship between comprehension of general reading ability and reading in the content areas? Comprehension of general reading ability may be defined by such tasks as reading for main idea, for sequence, to follow directions, and to draw conclusions (Russell and Fea, 1963). Reading in the content areas includes knowledge of technical vocabulary, interpretation of data, unique patterns of mental organization required to read the printed materials in each content field, devices, symbols, illustrations, and specialized purposes,

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[1]This chapter was also an invitational paper read at the Nineteenth Annual Meeting of the National Reading Conference, Atlanta, Georgia, December 4-6, 1969 and published in the Proceedings of the Conference: G. Schick and M. May (Editors), Reading: Process and Pedagogy, Nineteenth Yearbook of the National Reading Conference, 1970, Pp. 295-305.

[2]Since this review was written, some additional research has been reported. See: Harold Herber's Teaching Reading in Content Areas. Englewood Cliffs, New Jersey: Prentice-Hall, 1970. Also, H. L. Herber and P. L. Sander's Research in Reading in the Content Areas: First Year Report, 1969, $2.00. Syracuse University Press, 1022 Erie Blvd. East, Syracuse, New York.

motives and attitudes, which do not usually occur in tests of general reading ability (Russell and Fea, 1963; Smith, 1965; Moore, 1969).

Developmental Factors in General Reading Ability

No factor analytic studies could be located at the primary grade level. However, data available from studies conducted in grades one and two can be used for inferring factor analytic results. At the first grade level, Gates, Bond, and Russell (1939) found that the best tests for predicting reading progress were word recognition, ability to complete a partially told story, giving words which end with the same sound as an example, blending word sounds, ability to read letters of the alphabet, and ability to listen, understand and make use of the teacher's instructions in beginning reading. But, they emphasized:

> ...to the extent that the teacher's methods influence pupils' techniques of learning, they also affect predictive value of tests. Thus, if the teacher effectively emphasizes early phonetic attack, tests of blending, rhyming, etc. are likely to give higher correlations with reading progress in her class than in the teacher's class where less emphasis is placed on a phonetic approach. (p. 41)

Reading comprehension also does not appear to be a general, unitary factor at the second grade level. McCullough (1957) reported that the intercorrelations of comprehension scores for tests of main ideas, details, sequence, and creative reading were low, ranging from .26 to .45. These correlations indicate that a second grader could perform well on one type of comprehension, but not as well on another. Consequently, instead of general reading ability, specific reading ability should be measured in the primary grades. But, this specificity of reading

comprehension tends to be overlooked in selecting standardized tests for the primary grades (Singer, 1970).

However, Buswell (1922), cognizant of the close relationship between reading instruction and reading achievement in the primary grades, attributed the form of the total growth curve in reading, as assessed by eye-movement studies, largely to the method of instruction. He found that (a) in average number of fixations and in average duration of fixation pauses, there is a rapid, but negative acceleration through the fourth grade, then a plateau, followed by a peak in the tenth grade, and then a leveling off; (b) in rhythmic movements (lack of regressions) growth continues all the way through to college. Buswell explained that:

> The form of the total growth curve depends upon the order and rate of the various elements which enter into its composition. The theoretically most direct route toward maturity, which would produce the symmetrical development of all the elements involved, might be very different from the most economical and practical route.
>
> The direction of the route over which pupils travel depends largely upon the method of teaching. One school may begin its reading work by teaching children the alphabet, then simple words, and later sentences.... A still different curve of progress will be found when the initial emphasis is placed upon the sentence or some large thought unit. (pp. 56-60)

The leveling off at the high school level, Buswell believed, represented either a state of "final maturation" or lack of continued training. Ballantine (1951) and Gilbert (1953) confirmed Buswell's findings on the shape of the growth curve. But, instead of interpreting eye-movement behavior as solely a manifestation of central, not peripheral processes, Gilbert preferred an interactionist position.

Thus, in the primary grades, comprehension appears to be a function of a more specific factor, one which is dependent on instructional conditions. That is, an individual could perform well on one type of comprehension, but not on another because he had been taught or learned one type of comprehension better than another.

In grades three through eight, comprehension tends to be related to a more general factor. A general factor is one that accounts for a wide variety of reading situations or tasks. In other words, an individual who performs well on one type of reading task will also tend to do well on another task. When Gates (1921) administered a battery of tests, which covered such a wide variety of reading situations, all the tests, except one, intercorrelated .70 or better. However, Gates concluded that the results "do not justify the conclusion that we have in reading a group of functions bound by some general factor.... Reading is probably a 'broad function'...not a single capacity." (p. 310) Phelan (1940) arrived at a similar conclusion. After administering a battery of tests to 460 subjects, fourth and fifth graders, in six parochial schools in Chicago, and applying Spearman type factor analysis, she found that three factors accounted for 61 percent of the variance on the Durrell-Sullivan Reading Achievement Test: cognition contributed 52 percent; visual perception for words, eight percent; rote memory for words and letters, one percent; and other factors not accounted for, 38 percent to the variance in reading. Her interpretation of the results was that "no factor was universal to all the tests, common factors resulted from the influence of content, and, less prominently of process."

Apparently the magnitude of the cognitive or verbal factor increases with further development of general reading ability. Using the Kuhlmann-Anderson Intelligence Test for defining cognition or the verbal factor, Holsopple (1948) found that the loading of the Stanford Paragraph Meaning Test on the verbal factor was higher at grade eight than at grade four.

Systematic changes in factors underlying general reading ability do occur during the reading developmental continuum. When test content was controlled by administering the same battery of tests in grades three through six, the factors identified at grades 3, 4, and 5 were found to merge at the sixth grade level. Visual Verbal Comprehension and Auding merged into Audio-Visual Verbal Comprehension; and Auding and Visual Relationship merged into Auditory Visual Relationships. The three resulting factors accounted for 76 percent of the variance on the Gates Survey of Reading subtest,"Level of Comprehension:" audio-visual verbal comprehension accounted for 56 percent; auditory visual relationships, eight percent; and speed of visual perception, two percent. The mergers were interpreted as an integration of auding and visual verbal comprehension at a more central level or organization (Singer, 1965; 1967). At the high school level, Holmes and Singer (1966) defined eight factors in a matrix of 56 variables, but power of reading, assessed by the Van Wagenen Diagnostic Examination of Silent Reading Abilities, correlated significantly on only three factors: 66 percent on audio-visual verbal symbolic reasoning, nine percent on auditory perceptual, and three percent on speed of visual perception.

Thus, it appears that from the sixth grade level through high school, three factors account for some 75 to 80 percent of the variance in comprehension or power of reading.[1] The remaining 20 to 25 percent of the variance may lie in factors which were not tapped or did not emerge in these studies. Some factors reported in other investigations to enter into general reading comprehension at one grade level or another which may account for at least some of this remaining variance are: cognition (Conant, 1942), reasoning (Davis, 1942), auding (Caffrey, 1952), word meaning (Davis, 1942), verbal fluency (Langsam, 1941), number (Holsopple, 1948), values (Mandel, 1957), attention to accuracy (Kaiser, 1953), need to achieve (Bauer, 1946), personality characteristics, (Athey and Holmes, 1969), and temperament (Richardson, 1949). Some of these factors appear to overlap with factors already cited. The additional factors tend to be drawn from the affective domain.

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[1]However, Davis (1968) reported that a multiple correlation and a "uniqueness analysis" yielded at the 12th grade level eight predictors of comprehension of literary type content and purposes. These predictors are similar to those factors identified earlier (Davis, 1942; 1944), which were questioned by Thurstone (1946).

In a private communication, Davis stated that a factor analysis of his 1968 matrix yielded two identifiable factors, reasoning and word meaning, the two factors identified in his 1942 study, which accounted for 89 percent of the variance. The discrepancy between Davis's two factors and his eight predictors may reside in differences in the basic assumptions of mental structure and organization underlying factor analytic and multiple correlation models (Holmes, 1965) and in the lack of the use of a test of statistical significance in extracting factors from a correlation matrix or in adding predictors to a multiple regression equation.

Thus, comprehension of general reading ability in the primary grades appears to be specific to instructional conditions. During the intermediate grades, comprehension draws upon a set of more general factors, and from the intermediate grades through the high school level has approximately three-fourths of its variance accounted for by cognitive, linguistic, and perceptual factors. Its remaining variance may be accounted for by factors in the affective domains and by factors that are more specifically related to the particular type of comprehension being assessed.[2]

Reading in the Content Areas[1]

Although some factors become common to a wide variety of reading situations as individuals progress through the grades, reading comprehension is not a single complex of mental processes. From evidence based on eye-movement behavior in reading various types of material under several conditions, Judd and Buswell (1922) concluded that the processes involved in reading varied with the kind of material read, its difficulty, and the purposes of reading.

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[1]Appreciation is expressed to my research assistant, Sherrel Beasley, for her assistance on this project and to the ERIC/CRIER Center, Bloomington, Indiana for summaries on research in the content areas, which were used as part of the sources for selection of research reviewed in this paper.

[2]Models have been constructed to represent these factors and their interrelationships (Singer and Ruddell, 1970).

Similar conclusions have been reported in various studies conducted in content areas throughout the grades. Shores (1943) found that for ninth graders, science reading was related to power of reading, as assessed by the Gates Reading Survey subtest, "Level of Comprehension," but not to abilities in locating information or comprehending the general meaning of a paragraph. Shores and Saupe (1953) reported that in grades 4, 5, and 6 "Reading for Problem-Solving in Science," a test which contains content typical to that read in elementary school, correlated .63 with reading and .59 with arithmetic on the Progressive Achievement Tests, but had lower correlations than either of these variables with the California Tests of Mental Maturity. They concluded that "reading ability differentiates beyond the primary grades into somewhat specific abilities to read different kinds of materials for different purposes" (p. 157). Also, Kling (1965), in agreement with Holmes (1960) and Singer (1965) generalized that for comprehension in general reading ability or for reading in the content areas, individuals tend to mobilize, organize, and reorganize their capacities, subabilities, and processes according to momentary changes in their purposes and demands of the reading tasks.

Differentiating general reading comprehension, as assessed by the Gates "Level of Comprehension," from critical reading in social studies, as measured by an experimental edition of a social studies test, Sochor (1958) computed at the fifth grade a correlation of .64 between these two types of reading ability. With intelligence partialled out, the

correlation dropped to .17. The lowness of the correlations led Sochor to suggest that separate measures should be used to assess general reading and critical reading in social studies. However, Fay (1950) found that reading skills (predicting outcomes, understanding precise directions, comprehension, reading maps, charts and tables, and using indexes, references, and dictionaries), administered to sixth graders, were more closely related to achievement in social studies than to achievement in science or arithmetic when chronological and mental age were controlled. But, he also concluded that reading achievement should be considered in specific areas, and that reading is a combination of many specific skills rather than a general ability.

Reading also has some factors in common with arithmetic problem solving. Balow (1964), controlling I.Q. in an analysis of covariance design at the sixth grade level, found that reading as assessed by the Stanford Reading Achievement Test had a statistically significant effect on the arithmetic problem solving subtest of the Stanford Achievement Battery. He noted that for a given level of computational ability, problem solving increased concomitantly with reading ability. But not all reading skills are equally involved in arithmetic problem solving. Treacy (1944), holding mental age constant, discovered that arithmetic problem solving was little related to such general reading abilities as predicting outcomes, getting the central thought, and interpreting the content, but was more related to mathematical vocabulary, ability to perceive relations, ability to note details, and ability to integrate dispersed ideas.

Another factor which enters into reading in the content areas was identified by Gans (1940). She determined that a factor of selection-rejection, defined by tests of reference reading, accounted for about 25 percent of the variance in a composite reading test (California Reading subtests, Thorndike-McCall, and Gates A, B, and D), administered in the intermediate grades. After giving the reference reading test at the college level, she noted that both younger and older students manifested difficulty in maintaining the research questions within the bounds initially set, and in making judgments on relevancy. Since the reference reading test showed little improvement with years in school, she concluded that reference reading apparently was not systematically taught.

In one of the few factor analytic studies of the relationship between tests of general reading ability and reading in such content areas as geology, art, history, fiction, dictionary, tables, maps and graphs; Hall and Robinson (1945) identified at the college level the following factors for their types of reading situations: attitude of comprehension accuracy, rate of inductive reading, word meaning, rate for unrelated factors, and chart-reading skills. They concluded that reading skills for prose and non-prose materials are different, and that each of these skills is a composite of different subskills, abilities, and attitudes.

Why do reading abilities in specific subject areas differ from general reading comprehension? Russell and Fea (1963) summarized the differences succinctly as residing in (a) the technical vocabulary of

each field, (b) patterns of mental organization required to read the printed materials of each field, and (c) devices, symbols, and illustrations characteristic of each field. Each of these factors, they point out, calls for specific teaching.

However, very few experimental studies on specific teaching of reading in the content areas have been conducted. From the sparse research available, the evidence is clear that reading in the content areas can be improved through direct instruction in one or more of its general or specific factors: Rudolf (1949) instructed eighth graders in interpretation of social studies materials, reference work, note-taking, outlining, and summarizing, over a five month period, and found that her experimental group attained superior performance in social studies information, study skills, and comprehension. Johnson (1944) reported that a seventh grade group not only improved in the mathematical vocabulary taught, but also in arithmetic problem solving ability which included this vocabulary. Barrelleaux (1967) concluded that use of library sources instead of a basic text in science resulted in superior growth in science achievement and attitudes for 42 eighth and ninth grade students, matched with a control group on ability and interest, perhaps because the library contained books to meet the wide variation in reading ability whereas the basic text was restricted in range.

But, when there are not any common elements, there is likely to be little, if any, transfer from training in social science to another content area or to general reading ability. For example, Rushdoony (1963) found that map-reading skills, assessed by the Iowa Test of Basic Skills,

which are normally taught to fourth and fifth graders, could be learned by a representative group of third graders, but this attainment did not significantly improve their general reading ability as measured by the Stanford Achievement Test. Likewise, when fifth graders were given direct instruction on arithmetic vocabulary, there was significant improvement, particularly among those in the average and superior intelligence groups, in arithmetic vocabulary and problem solving, but not on general vocabulary nor on reading comprehension as assessed by the Iowa Tests of Basic Skills (Vanderlinde, 1964).

Also, when specific vocabulary and purposes of reading in the content areas are emphasized, students tend to perform significantly better in comprehending the content. For example, in an experiment at the seventh grade level on social studies content drawn from American history textbooks, Rehmann (1968) found increasing gains were realized in comprehension of vocabulary concepts under the following conditions: to the usual task or treatment of reading the selected passage and answering questions, he first added an expository advance organizer, then advance qyestions, and finally specific vocabulary instruction and marginal notes explaining vocabulary concepts. For all four comprehension skills (understanding explicitly stated content, recalling word meanings, making inferences about the content, and following sequence or structure of the content), the last two treatments, advance questions and specific vocabulary instruction, were superior to the use of expository advance organizers only, which did not differ significantly from the first treatment, reading the passage and answering questions which was used as a control type of treatment.

The relation between general reading ability and reading in the content areas depends to some extent upon purpose in reading. When two groups of eighth grade students, matched on intelligence and general reading ability, were directed to read expository mathematical materials for different purposes, the group which read for main ideas had higher correlations with their general reading ability than the group which read for finding answers to a specific questions (Troxel, 1962). Similar results were attained by Shores (1960). Using a combination of California Achievement Tests and Iowa Silent Reading Tests plus the science achievement section of Sequential Tests of Educational Progress to equate two groups, he had one group read a science passage for the main idea and the other for recalling sequence of ideas. The results indicated that reading for the main idea correlated .65 with general reading ability while reading for sequence correlated only .51. Shores concluded that tests of general reading ability are not necessarily good predictors of reading science materials for purposes different from those demanded on tests of general reading ability.

Summary and Conclusions

In the primary grades, reading comprehension appears to be a specific factor, dependent on the conditions of instruction. During the intermediate grades, common factors emerge and these factors tend to integrate at a more central or mediational response level and become common to a variety of reading situations. Factors identified as underlying general reading comprehension in the sixth grade appear to be the same as those which emerge at the high school level. Some additional

factors, primarily from the affective domain, have also been defined and found to correlate with general reading comprehension. Including all of these factors, we can state that general reading ability draws upon factors in the cognitive, linguistic, perceptual, and affective domains. However, reading in the content areas draws to some degree upon common factors and to some degree upon more specific factors, particularly when the comprehension tasks involve interpretation of data, knowledge of technical vocabulary, various patterns of mental organization in printed materials, use of devices and symbols, and specialized information, purposes, motives, and attitudes.

Although research on reading in the content areas is sparse, some specific factors have been identified, such as selection-rejection or judging relevancy in reference reading, and chart-reading skills. Also, some specific factors in reading science, social studies, and mathematical materials have been implied by research results. But, the degree to which reading in the content areas correlates with common or specific factors depends upon the content of the tasks and purposes in reading them. Some experimental studies have demonstrated that when purposes in reading in content areas are shifted towards general reading abilities, such as reading for the main idea, there is a greater degree of relationship between the two types of reading.

Reading in the content areas can also be improved. For example, when specific vocabulary and purposes of content reading were stressed, readers gain in comprehension. Also, when individuals could select their own materials for reading science at the junior high school level their achievement was higher than students restricted to the basic text.

In general, investigators tend to agree that after the primary grades, "reading ability differentiates into somewhat specific abilites to read different kinds of materials for different purposes" (Shores and Saupe, 1953, p. 157). Hence, they recommend that reading ability should be assessed separately in each specific content area.

However, changes are occurring in developmental reading programs which are likely to have some consequences for the definition of general reading ability and for tests to assess it. For example, at least one elementary basal reader program has expanded to incorporate reading in the content areas: the Harper-Row series (O'Donnell, et al., 1966), recently adopted by the State of California for use in all its elementary schools, contains two developmental sets of readers, one for development of skills in general reading ability and the other for instruction in reading in the various content areas of the curriculum. Consequently, we anticipate that tests to assess development of reading ability will also be expanded to include both types of reading. Then the distinction between general reading ability and reading in the content fields will tend to be diminished. How these changes will affect the developmental pattern of factors involved in general reading and reading in the content areas, of course, must await further research.

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Chapter Three

Methods and Materials for Teaching Reading in the Content Areas[1]

A question frequently asked by teachers, but not often answered in reporting teaching experiments, is what materials did you use in your project? We shall try to answer this very practical question in detail. However, the question cannot be answered in a few words because we drew upon a great variety of materials. We used state texts, teacher-made materials, such as reading and reasoning guides, library materials, and some $10,000 worth of texts, paperbacks, laboratory kits, workbooks, magazines, games, and other materials purchased by the Reading Content Specialists. Project funds were allocated to the Content Reading Specialists' junior high schools for them to expend upon the advice and consent of local committees.[2] Consequently, the materials purchased for the project were those that teachers believed would be useful and relevant to teaching reading in the content areas.

Space limitations precluded descriptions of all the material we had found to be useful. But, to have to select from a mountain of

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1 This chapter was prepared by Sylvia Cherry, one of the Content Reading Specialists in the program, and her husband, Paul Cherry, a graduate of the University of California, Riverside, and now an instructor at Riverside Junior College.

2 Each junior high school had a committee consisting of Content Reading Specialists, other faculty, two or three community representatives and the principal. The purpose of the committee was to formulate criteria for the expenditure of the $2,500 budget assigned to each school and to determine final signature authorization for purchases. The Content Reading Specialists initiated the requests for purchases for themselves and other teachers on their faculty. Final signature authority was given to principals in three of the four junior high schools and to a classroom teacher in the fourth junior high.

materials only those that had been most productive in achieving the goals of our project was very difficult to do. To resolve the selection problem, we adopted the strategy of describing only some of the material here and listing in an appendix the remaining materials, many of which we had found to be equally beneficial. Also, because we wanted to communicate an idea of the variety of materials we had used, we chose for description here materials that were representative of these four major objectives of our project:

1. To teach reading in the content area through specific reading instruction in each subject. This is essential if students are to adapt reading skills to the requirements of different subject disciplines, and if they are to understand both the process and content of that discipline.
2. To motivate classes with highly divergent reading abilities by providing materials suited to these differences.
3. To provide mature, high interest, yet easily mastered materials for the frustrated, apathetic low achiever, thereby attitudinally and scholastically encouraging skill-handicapped students.
4. To meet the needs of minority groups. Spiegler (1968, p.12) stressed the meaning and importance of this goal in the following excerpt:

> The effects of discrimination combined with poverty and failure to meet the demands of the school make a formidable barrier to the development of a favorable self-concept in the minority-group child...For these children personal success in school is not enough; the teacher must provide experiences which engender pride in who and what they are. When they are able to believe that they are neither inferior nor inadequate, they will begin to "strive hard" to protect their newly developed self-esteem. Although it may seem a difficult task for the teacher to help pupils change in such a way, it is possible because expectancies have been acquired and can be

changed according to the principles of learning. The attitude is of prime importance in the development of self-esteem and the changing of expectancies. Important, too, are the materials the teacher chooses to give to pupils.

The types of materials and the techniques which most effectively promoted these goals include:

1. paperback books
2. motivational aids and techniques
3. individualized units and experiences developed by students
4. audio visual aids and skillbuilding materials
5. commercially designed units
6. texts and the instructional framework.

These categories are clearly not exhaustive. Yet they do accurately reflect the most significant techniques and materials used in the content reading program. In addition, as Loban, Ryan, and Squire, (1969, p.386) stress: "an increase in flexibility of method and materials does not, of course, imply complete rejection of similar content for all pupils. What is needed is a modification in classroom strategy. A better balance among the way of instruction frees the teacher to work with pupils who most need help in reading -- some of them stumbling, others so gifted they lose interest under confining routines."

PAPERBACK BOOKS

Paperback materials include pamphlets, magazines, comic books, fiction and nonfiction stories, and reference books. A wealth of material is available in paperbacks as shown in the appendix to this volume. The paperback has definite advantages in all content area classrooms because it allows teachers to experiment with fresh material and to supplement or eventually replace materials already in the curriculum. Students

responded positively to the variety of ways paperbacks were utilized in the program. Included among this variety were the following:

1. Paperbacks were used to individualized reading in the unit approach type of curriculum. Units were topical and broad, e.g. "Fantasy and Science Fiction," "Courage," "Conflict," "Biography," "Understanding Ourselves and Others." By using this approach many different titles were introduced, thereby minimizing the problem of securing a book that interests a student.
2. The sustained reading method offers an effective solution to many problems of pupil variation and can be implemented in any subject area. In this method, teachers simply allow students to read any paperback for an amount of time elected by the class once a week. Teachers who used this approach stressed the importance of taking part in the sustained reading time themselves.
3. In classrooms where basic texts are used, teachers used paperbacks to supplement the content. The teacher selected paperbacks appropriate for the particular topic being studied and for the needs of the students, thus providing easy access to supplementary reading.
4. In another class, paperback books were used to entice poor readers or students who express "I don't like to read" attitudes, to read. This idea was suggested by Hal Herber[1] and proved successful. The teacher displayed new paperbacks while students worked on a daily lesson, and then announced that when they had completed their lesson, they were free to select a paperback. Enthusiasm to this reward was high and students responded eagerly.

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1 Professor Harold Herber, Syracuse University, served as a consultant to our project.

This activity occcurred monthly as new paperbacks arrived.

5. Some teachers motivated students to build up a classroom card catalogue of paperbacks. Pupils selected and read their choices, then placed cards for favorite books in a classroom file box. The content of these cards was: author, title, type of book, and recommending statement. Students signed their names to each card entered and over the year a substantial and useful file accumulated.
6. Magazines and other paperbacks were used in science classes to enrich studies in sensory perception, the brain and drugs, environmental studies, ESP, and space.

Paperbacks, then, were used to supplement, enrich, broaden, individualize and give background to content area classes.

Some of the difficult tasks facing the teacher who decides to include paperback materials in the curriculum is selecting titles, and learning how to obtain the materials. In answer to these questions, we found the following sources:

1. Most publishers of paperback books publish educational book lists with titles listed and sometimes annotated under topical or subject headings.
2. Paperbacks are offered inexpensively through book clubs sponsored by Scholastic Book Services, American Education Publications, and the Arrowhead Book Club.
3. Students donated paperback collections which provided excellent titles. They also donated a variety of magazines for the classroom libraries ranging from National Geographic to Sports Illustrated.

4. Additional sources were obtained by referring to studies published by the International Reading Association and the National Council of Teachers of English.

The results of using paperbound books were favorable. Among these were:

1. The display and use of a variety of paperbacks, easily accessible in classrooms, affected positive reading responses from both reluctant and highly motivated students.
2. Students spent more time in leisure reading and began discussing, sharing and freely recommending books. For example, after Guinness' Book of World Records was discovered by a student and a few items from it shared with the class, most students were eagerly awaiting their turn to read it.
3. Students began asking if they could take books home to share with parents or brothers and sisters.
4. Many students, including reluctant readers and minority students, began making book requests selected from Scholastic's Teen Age Book Club.
5. Other teachers became interested in ordering books for their classrooms.

Successful use of paperbacks in our program was not an isolated nor an exceptional case. Professional journals have reported many similar encouraging results by other teachers.

The appendix of this volume includes a sample of over 500 titles abstracted from over 2600 titles used in the program. These include paperbacks from most curriculum areas of the junior high school program.

MOTIVATIONAL AIDS AND TECHNIQUES

Several techniques, fused into the curriculum of various classrooms, aimed at drawing pupils into the dynamics of a student-centered curriculum. We found that these techniques, described in this section, encourage greater student notivation and involvement in the process of learning. In fact, they proved to be among the best contributors toward achieving the goals of the program.

Central to the language arts and social studies classes were the integrated approaches proposed by Moffett (1968). He proposes the following techniques: learning through group process, active student participation, activities which give practice in general thinking skills, and involvement in writing, discussing, dramatizing, reading aloud, and commenting on each other's writing. A fuller argument and description of the interrelated program can be found in Moffett's book; only three of his techniques, used successfully in the program, can be discussed here.

Moffett (1968, pp. 12-13) argues that learners should use language far more than they customarily do in most schools today because it is through use of language that reading comprehension, among other essential language learnings, come about. "The only way," states Moffett, "to provide individual students enough language experience and feedback is to develop small-group interaction into a sensitive learning method. The teacher's role must be to teach students to teach each other." Through this principle, three basic classroom procedures were introduced and practiced with great success. The first was a structured procedure called "Grouptalk," the second was cross-ability teaching and the third was keeping a daily log or journal.

Whipple (in Moffett, 1968, p. 572) defines Grouptalk as "A formal discussion of a question by a small group and a leader following the specific rules that all members of the group contribute relevantly to the discussion and that all help in the effort to summarize it." Moffett then clarifies Whipple's definition:

> 'Formal' refers to the governing influence of the rules, not to the atmosphere, which is relaxed and lively. 'Small' means three to six. The group is heterogenously composed. Implicit in the definition are three primary functions of a leader: (1) to direct strategy, (2) to keep the group relevant, (3) to see that a summary is achieved. The group shares with the leader the responsibility for calling attention to departures from the rules, and, by this means, 'the teacher prepares for a gradual transfer of leadership to a student.' Dr. Whipple stresses the point that the teacher concerns himself with the group process, not with content or information. He is teaching children 'how to think, not what to think.'

Through Grouptalk, students analyze, synthesize, discriminate, compare, and generalize questions within unit, chapter, or thematic studies. This activity encouraged reluctant readers and motivated all students to read carefully the material which preceded or followed Grouptalks.

The second approach, cross-ability teaching, also affected student attitudes. Students of better ability paired off regularly with students of lesser ability to work together on assignments. Selection of partners was done in a variety of ways: teacher-appointed, student's choice, coupling of rows, but always the pairings were determined by similar study interests. Students as a whole worked harder when they were accountable to each other rather than merely to the teacher. This activity, of course, can be used to great advantage in any content area and for any group of students.

The third successful motivating activity was keeping a daily log or journal with entries based on daily reading, current events, eye witness

reporting, scientific observations, memoirs, or any other thought-producing, language-producing topic. Since, as Moffett (1968, p. 11, 16, 20) argues, "A writing assignment...is a thinking assignment," and since "mental activities" such as "'recalling,' 'comprehending,' 'relating facts,' 'making inferences,' 'drawing conclusions,' 'interpreting,' and 'predicting outcomes' are general properties of thinking," it seems reasonable to accept Moffett's conclusion that the writing process set forth in this program and in this activity directly "help to develop the faculties necessary for reading comprehension."

In addition, for the area of social studies there are many simulation activities which instruct and motivate students on present and historical issues. Among these are the Interact Educational Simulation units offered by Interact of Lakeside, California. The teacher guide has the following discription of simulations and the "new" social studies:

> In America today social studies teaching is in ferment. No longer satisfied with classroom teaching dominated by textbooks, teachers are examining course content and teaching method in the light of concepts such as the following: inductive or inquiry learning; discovery of a discipline's structure; involvement through interaction and value conflicts; learning rather than teaching. One method incorporating all of these ideas is to apply game theory to classroom instruction by constructing simulations.

Authors who have written and developed these units report that students have been fascinated by these direct experiences. They offer a reality of experience which stimulates self activity on the part of the students and consequently increases reading involvement.

Games, too, were introduced into some classrooms as motivational and as nourishing logical thinking ability. Moffett (1968, p. 155, 266) supports this technique: "The decisions necessary to play checkers,

cards, scrabble, and other games...come from figuring out possibilities, syllogizing, and predicting. Card games in particular have given practice in classifying and in concept formation. In objective and explicit fashion, the pupil has arranged concepts hierarchically and grasped inclusion. Hand in hand with the growth of concepts goes the growth of vocabulary." The subject matter of the games embraced mathematics, social studies, language arts, science, and home economics. Among the games used were:

1. "Dig." Salem, Massachusetts: Parker Brothers, 1968.
2. Dolch, Edward W. "Make One," A Fraction Game. Champaign, Illinois: Garrard Publishing Company, 1956.
3. Dunne, Ada E. "Auto Phonics." Los Angeles: Venus Publishing Company, 1970.
4. "Perquackey." Minneapolis, Minnesota: Leisure Dynamics, 1970.
5. "Scrabble." New York: Selchow and Righter Company, 1953.
6. "Spill and Spell." Salem, Massachusetts: Parker Brothers, 1957.
7. "Tri-Ominos: The Triangle Game." Pressman Co.
8. "Word Power." Baltimore: The Avalon Hill Company, 1967.
9. "Scrabble: Bali Card Game." New York: Selchow and Righter, 1954.
10. "Ad-Lib." New York: E.S. Lowe Company, 1970.

INDIVIDUALIZED UNITS AND EXPERIENCES DEVELOPED BY STUDENTS

Throughout the program emphasis was on maintaining a flexible learning situation. The rationale for this is expressed by Loban, Ryan, and Squire: (1969, pp. 385-386):

> ...a departure from an exclusively formal organization is one of the more effective steps toward improving reading in the classroom. Such an increase in flexibility of method and materials does not, of course, imply complete rejection of similar content for all pupils. What is needed is a modification, not a revolution, in classroom strategy. A better balance among the ways of instruction frees the teacher

> to work with pupils who most need help in reading--some of them stumbling, others so gifted they lose interest under confining routines.

For teachers who have to rely on one textbook and have no funds to purchase materials, the following way of designing a unit is a workable approach to providing variety: One of our Reading Content Specialists, a social studies teacher, had students develop a unit of study materials for any country they selected in their text. Students worked in groups of two to five which allowed for cross-ability instruction and sharing. Each group designed a complete unit, which included vocabulary, lessons, maps and map study guides, reading guides for understanding the content of the chapter, and an evaluation of the study of that country through student designed tests. Students designed their units according to basic structures the teacher had provided in previous geographical studies, but students were free to adapt their units to any design they structured.

Students at all levels worked enthusiastically and produced good instruction units. Youngsters with poor reading abilities as well as minority youngsters with learning difficulties worked as eagerly as students of good or superior reading ability. This project provided for individual differences by allowing pupils to progress at their own level and still produce a satisfactory unit of work. The teacher moved regularly to each group and rewarded the limited progress of slow workers as well as the rapid progress of other groups. Additional motivation occurred when the teacher took slides of student work groups and recorded student conversations during the planning stages of each group. The unique value of this activity was that through the process of designing

a learning activity package, students also learned the content of social studies.

This is an example of an activity that might be used once or twice during the school year in any subject area to integrate content with depth and variety of learning, and also provide for individual differences.

AUDIOVISUAL AIDS AND SKILLBUILDING MATERIALS

Teachers in our program used numerous audiovisual resources. In our program, the overhead projector was a valuable device for use in teaching a variety of lessons, ranging from a vocabulary lesson to a science demonstration. Several techniques were used to maintain interest and attention in a lesson. Among these are the pointing method, using a transparency as a chalkboard, the revelation technique where only segments of the lesson are shown at a time, the silhouette technique by which geometric figures or science speciments can be projected, the projection of transparent objects, the use of colored transparent tapes and sheets, and the employment of overlays. Teachers found that the task of fusing reading skills and content for diversified student abilities was simplified and made effective through the use of the overhead projector and teacher-made or commercial transparencies.

Cassette and tape recorders were utilized extensively for developing reading, speaking, and listening skills. The recorders were used in the following ways:

1. To record and play stories for student listening and silent reading.

2. To record and play vocabulary and spelling exercises for small group work.

3. To give minority students with bilingual difficulties oral reading and speech practice. Students taped reading and discussion of stories and articles. They replayed them and worked on revisions of the recorded material. This activity greatly affected their attitude toward reading, school work and themselves.

4. To record activities, e.g. role playing, panel discussions, Grouptalk, and talks by guest speakers. These tapes were used for later review and discussion.

In addition to the reservoir of stimulating audiovisual aids (recordings, posters, bulletin boards, slides, films, filmstrips, pictures, and study prints) aimed directly at the achievement of goals stated in the introduction of this paper, some newer teaching aids and skillbuilding materials used in our program m. it direct mention. Among these were:

1. "Science Unit Books." American Education Publications Center. Columbus, Ohio 43216, 1970-71.
   These are activity-centered booklets covering earth, physical, and life sciences. Booklets include interesting exercises and a wealth of photos. Grade 7-12.
2. Benner, Patricia Ann. Troubleshooter: A Program in Basic English Skills, Palo Alto: Houghton Mifflin Company, 1969.
   A set of basic language skills exercises consisting of seven separate booklets. The exercises are programmed for individual progress beginning with sounds of letters, developing into word-attack skills and vocabulary building, and finally building into concentrated work on sentences and paragraphs. This is an attractive and easy to use program.

3. Roberts, Clyde. Word Attack: A Way to Better Reading. New York: Harcourt, Brace and Company, 1956.

   This book provides exercises on context clues, dictionary work, vowel sounds, consonant sounds, syllabication, prefixes, suffixes.

4. Folkways/Scholastic, 906 Sylvan Avenue, Englewood Cliffs, New Jersey 07632.

   The comprehensive 1971 Scholastic Audiovisual Catalog contains a wide variety of materials, many of which were used in our program. Materials are included for home economics, consumer education, business classes, language arts, social studies, science, foreign languages, music, and social studies.

5. Color Sound Filmstrips from Warren Schloat Productions, Inc. A Prentice-Hall Company, Pleasantville, New York 10570.

   These multimedia programs employ recorded narration and visual presentation. The various sets offer an excellent combination of background material for art, music, history, social studies, literature and guidance classes. Titles include: "Minorities," "Myths of Prejudice," "The American Indian," "Great Works of Art," "UNICEF Art," "Folk Songs in American History," "Exploring Moral Values."

6. Niles, Olive Stafford, et. al. Tactics in Reading I. Palo Alto: Scott, Foresman and Company, 1961.

   Tactics I is a kit of exercises designed for students in secondary schools who fall below expected levels of achievement in reading. The Tactics lessons to quote its own advertisement are "easy enough to be done with a high degree of success and yet sophisticated enough to be challenging." The exercises include

the following skills: (1) Attacking words by using context, structure, and sound clues, and the dictionary; (2) Reacting to Imagery; (3) Following sequence; (4) Understanding sentences; (5) Drawing inferences; (6) Understanding paragraphs; (7) Analyzing affixed words which have common foreign roots.

7. Olsen, James T., editor, and others. Enrichment Paperback Classroom Library. New York: McGraw-Hill Book Company.
This library contains multiple copies of 107 selected novels, stories, and pamphlets that explore contemporary themes of vital interest to concerned students. The illustrated books are written at a fifth to seventh grade reading level. Included among the books are: twenty adapted classic novels, short stories and poems. These have been rewritten at a fifth to seventh grade readability level. Twelve original novels and short stories on contemporary life. Five anthologies of vignettes on different modern life styles. Eighteen novellas on earning a living. Two workbooks to improve reading skills. Fifty four-page pamphlets on interpersonal relationships in the working world.

8. Scholastic Magazines, Inc., 902 Sylvan Avenue, Englewood Cliffs, New Jersey 07632.
Scholastic Magazines offers a number of excellent weekly and monthly magazines which bring classes in-depth, curriculum-related articles, storeis, and exercises. They motivate students to read with high-interest topics on youth, get students to talk about important contemporary issues, and helop students increase

their vocabulary, word usage, grammar and other communications skills. Among the magazines offered are Scope, Junior Scholastic, Senior Scholastic, and Voice. Excellent teacher guides and materials accompany classroom orders.

9. Smith, Nila Banton. Be a Better Reader. Englewood Cliffs, New Jersey: Prentice-Hall, 1968.

   This is a program which provides basic skills practice in the content fields of science, mathematics, social sciences, and literature. Many teachers have found that this workbook program works successfully with groups and with individual students.

10. Sonn, David, (Editor). Come to Your Senses. Englewood Cliffs, New Jersey: Scholastic Book Services.

    These boxed units contain four filmstrips, a set of 8 1/2 x 11 inch photographs printed on heavy cardboard, seven 17 x 22 inch posters, and an eighty-page Teaching Guide that suggests dozens of ways of using the Units' visual resources for stimulating student writing and for encouraging fresh perceptions and original speculation. The program is applicable to all grades, seven through twelve. All the photographs, graphics, and paintings have been created by students; they were chosen from the Scholastic Art and Photography Awards competitions. Most teachers have reported that this is a very versatile aid.

11. Sound Filmstrips from Guidance Associates. Pleasantville, New York: Harcourt, Brace and World.

    These are sets consisting of two records, two color filmstrips, and a discussion guide. The filming and narration are excellent and appealing. The wide range of titles can be used in langu-

age arts, social studies, guidance, and history classes. Titles include: "The American Humorists," "The Harlem Renaissance and Beyond," "The Literature of Protest," "Language," "The Hope Tree of Harlem: An American Folktale."

12. Spatafora, Jack B. and Patricia Finegan. Interactions of Man. Chicago: Rand McNally and Company, 1969.
    This series is divided into four sets of large hard-backed prints. Each kit draws upon one or more of the social sciences for its content, and is organized for a significant development of that content. The concepts developed by each kit are the "Interaction of Man and Man," the "Interaction of Man and His Environment," the "Interaction of Man and His Resources," and the "Interaction of Man and His Past." Each kit is quite flexible and can be used to introduce, support, complement, enrich, or extend class work.
13. Van Zandt, Eleanor, (Editor). Pattern for Reading. New York: Scholastic Book Services, 1971.
    Pattern for Reading is a paperbound textbook that allows students in grades 8 through 12 to work independently on five main categories of reading skills: Vocabulary, Reading Critically, Reading for Main Idea and Detail, Organization, and Reading for Speed.

COMMERCIALLY DESIGNED UNITS

In our work, we found genuinely helpful the curriculum projects of Scholastic Book Services, Project English at Hunter College, Springboards

Learning Programs, Pathways in Science, American Education Publications, Field Education Publications, Random House, and Holt, Rinehart, and Winston. These firms published units generally organized around a common theme or problem presented in a wide variety of easy to difficult read-ability levels. Opportunities are provided for the study of selected content introduced through significant experiences in thinking, reading, writing, speaking and listening skills. They are particularly unique materials in that they exhibit one of all of the following characteristics:

1. They provide for flexibility rather than rigid uniformity in classroom instructions and activities.
2. They offer experience-based rather than symbol-based learning.
3. The reading selections present immediate orientation rather than part-and-future orientation.
4. Many of the suggested activites emphasize social participation (doing) rather than academic preoccupation (knowing).
5. There is an equal emphasis on affective and inner content rather than sole emphasis on cognitive, extrinsic concern.
6. They have a general attractiveness for teachers and students.
7. Their sequential skills instruction is developed with attention to student interests and needs, expecially those of minority students.
8. They can be easily and effectively used.

These units also provide the teacher with lesson plans and related activities. The lesson plans present ways to teach various skills as an integrated part of the study of the content. Students responded enthusiastically to these units. The following is a description of the units used in our program.

1. American Education Publications Harvard Public Issues Series and Social Studies Unit Books For Grades 7 - 12. Columbus,

Ohio: American Education Publications, 1970-1971.

These books employ case studies that involve students intellectually and emotionally in vital issues that have persisted in our society for centuries. Using dramatic stories of people and events, classroom games, role-playing and similar techniques, the AEP/Harvard books provoke discussion of these issues. Through discussion of controversies as they existed in history and as they continue to perplex us today, students form independent value judgments on basic social questions.

2. Bamman, Henry A. (director) Kaleidescope. San Francisco: Field Education Publications, 1970.

This is a basic reading program for junior and senior high school students. The series uses high appeal and relevant content, but the reading level of the series of eight patent-bound books ranges from second grade to ninth grade reading level, according to Spache and Dale-Chall formula. Its complete skills program includes word attack, vocabulary, comprehension and study skills, applicable to reading in all subject areas.

3. Brooks, Charlotte K. (General Editor). Holt's Impact. New York: Holt, Rinehart and Winston, 1967. (Language arts, social studies)

This is a series of four paperbound anthologies (Conflict, Search for America, Sight Lines, Unknown World), with a fourth to sixth grade reading level. The series is accompanied by recordings of stories and supplementary filmstrips which appeal to students. This is an excellent motivational series for

average and below average junior high language arts or social studies classes.

4. Cebulash, Mel. Action. New York: Scholastic Book Services, 1970.

   Action is a language arts program developed for secondary students reading below fourth grade level. Action incorporates basic word attack and reading comprehension skills into eighteen weeks of reading, role playing, discussion and writing. The program has four major aims: to motivate students to read; to build skill in word attack; to build skill in reading comprehension; to build confidence. All students reacted favorably to Action's absorbing stories. This is an excellent series.

5. Goodykoontz, William(editor). Contact. New York: Scholastic Book Services, 1969, 1971.

   Contact is a series of thematic units designed to make literature come alive for the disadvantaged or hard-to-reach student in junior high and high school. The reading level of the units ranges from fourth to sixth grade. Each of the thematic units is designed for multilevel use in English, reading, social studies, or guidance classes. The units, according to the editor, have "been designed to motivate students to take an active part in the learning process; to get them interested in discovering knowledge, in reading, and in expressing what they think and feel about a subject of vital importance to them and to our society." Each unit consists of unit anthologies, logbooks, a record, posters, and a teaching guide.

6. Granite, Harvey R. (Editor). Houghton Mifflin Action Series: A Reading Breakthrough Program (Encounters, Challenges, Crosscurrents). New York: Houghton Mifflin Company, 1970.
   The Action Series is designed to interest secondary students who are not reading up to their grade level and aims to improve their reading abilities. It consists of sets of four books, organized so that the reading progresses through four levels. The majority of the selections require fourth or fifth grade readability levels.
7. Hoexter, Corinne, and Ira Peck. American Adventures Program: Volume 1: 1620-1860: A Nation Conceived and Dedicated. New York: Scholastic Book Services, 1970.
   American Adventures is a high-interest, low difficulty level American history program. It has been designed for junior and senior high school students whose reading skills are several years behind the average for their age and grade level.
8. Hunter College Project English Curriculum Study Center (Marjorie B. Smiley, Director). Macmillan Gateway English. New York: The Macmillan Company, 1970.
   This is an ungraded language arts program created for educationally disadvantaged students and reluctant readers. The program consists of materials for three years of developmental literature and language arts instruction. The selections in the four softback anthologies for each level are interesting to students. The short stories, vignettes, articles, plays, folk tales, songs, and poems were drawn from such contemporary and traditional

sources as Negro Digest, television scripts, Life magazine, ballads and mythology. Reproductions of works of art and photographs are integrated with the text.

9. It's Your World. Instruction Dynamics Incorporated. It's Your World, a reading series in which the content is about science, is a boxed library of ten independent units. It is accompanied by an excellent teacher's guide.

10. Oxenhorn, Joseph M. and Michael N. Idelson, and Peter Greenleaf. Pathways in Science: Chemistry, Physics, Biology, Earth Science. New York, Globe Book Company, 1968. Pathways in Science is designed for the junior and senior high school pupil who is reading on a fifth-grade level. Its high-interest level is intended to develop an appreciation for science and a strong feeling of accomplishment on the part of the student. The specific objectives of the series are: (1) To teach concepts in the four major disciplines of science; (2) To develop simple manipulative skills in both laboratory equipment and home materials; (3) To develop mastery in reading skills in order to enable the student to read science literature with maximum understanding; (4) To develop work-study skills in science; (5) To develop scientific attitudes and appreciations. A strength of the series is the teaching guide which has an excellent outline on "Hints on Good Science Teaching."

11. Rambeau, John, Nancy Rambeau, and Richard E. Gross. The Americans All Series. San Francisco: Field Education Publications, 1969.

This series of eight, authentically based stories, has as its main character a young person of a particular racial or ethnic background in situations to which the student can relate. The series' primary aim is to guide pupils toward critical thinking, depth and breadth of understanding, and insight into other cultures. Its high-interest, low level difficulty is suitable for readers on the junior high level.

12. Challenger Books. New York: Hill and Wang, 1971.

"Challenger Books are realistic, multi-ethnic stories about Black and Spanish-speaking youngsters. Their authors are members of (or dedicated workers among) the ethnic group they are writing about. The complete Challenger Program includes ten different stories, Study Cards that contain comprehension questions about the story itself as well as provocative thought type questions, and a comprehensive Teacher's Guide. They can be used in a project or as supplementary reading in English or in social studies classes."

13. Rushby, J.G., J. Bell, and M.W. Dyback. People and Places: Case Studies in World Geography, 1-5. Chicago: Rand McNally and Company, 1967.

This is a series of five books collectively containing forty-eight case studies of relationships between man and his environment. The case studies consist of booklets well-illustrated with pictures, maps, plans, graphs, charts, and guide questions. The series develops skills in observation and in forming logical conclusions about geography and man's relationship to his geography. It is an excellent series for wide-range

reading abilities because it contains very little text but provides for high-level thinking, writing, and discussion.

14. Spiegler, Charles G., editor. Merrill Mainstream Books. Columbus, Ohio: Charles E. Merrill Publishing Company, 1968. The books contain selections which are particularly relevant to the lives of inner-city youth. The books, the lesson guides, and the teaching methods suggested in the handbook can be used with little modification in approach in suburban or rural classrooms with high percentages of educationally disadvantaged students. The reading levels of the selections in the series vary from grade 4.0 through 7.5 .

15. Springboards Learning Programs. New York: Portal Press, Inc., 1966-1969. (Language Arts, Social Studies, Science. Readability level, 4-6.)

    Springboards are self-contained lesson kits designed to stimulate interest in reading and working in content areas. Each Springboards series provides motivating lessons in academic subjects important to but often disliked by the poor reader. Springboards have great appeal for all students. Some narratives read like exciting yet plausible teenage adventures, but still teach science, geography, social studies or language arts concepts. Others are historical articles which highlight contributions of all racial and ethnic groups to the American heritage. Each kit is accompanied by a teacher's manual which provides a directed lesson for each of the selections in the kit. The general objectives of all selections are to strengthen reading comprehension, encourage recall of factual material,

increase vocabulary, develop the ability to draw inferences from factual material, stimulate discussion and group work, and individualize learning. Among the titles are : "Life Science," "Negro in American History," "English-Spanish Look-Alikes," "Survival: A Geographic Approach," and "Viewpoints in Fiction."

16. Sullivan, Mary W. Happenings. San Francisco: Field Educational Publications, 1970.

    These books are designed to develop reading skills of students reading below grade level. Woven into these novelettes are interests of the young: teen-age music and boy-and-girl relationships.

17. Firebird Books: The False Treaty, Anne Terry White.
    The Defenders, Ann McGovern.
    The Storming of Fort Wagner, Irving Werstein.
    The Spy, the Lady, the Captain, and the Colonel, Richard Stiller.
    New York: Scholastic Book Services, 1970.

    Firebird Books are designed to help readers understand some of the less familiar events that have flowed with great force into the mainstream of American history. They deal especially with the experience of minority Americans, and combine history and biography. The history books focus on specific episodes, enlarging material that is treated briefly, if at all, in most textbooks. The matching biographies focus on people, famous and obscure, who lived in the time covered by the history book.

TEXT AND HERBER'S INSTRUCTIONAL FRAMEWORK

One of the goals of the program was finding fresh ways in which reading instruction can actually become part of the regular curriculum

in each content area regardless of the types of materials being used. The procedure developed by Harold L. Herber in his books, Teaching Reading in the Content Areas, was widely used by language arts, science, social studies, and mathematics teachers. Herber (1969,pp. 4,11) takes the position that content teachers must be teachers of reading but with a role different from that of the reading teacher. He states that "There is a need for a whole new strategy in teaching reading through the content areas, a strategy that uses what we know about the direct teaching of reading but adapts that knowledge to fit the structure of and responsibilities for the total curriculum in each content area."

The purpose of the teaching of reading in content areas, Herber argues, "is to help students acquire the skills they need for adequate study of all the materials required in their subjects. Using subject-related material, regularly assigned, as vehicle for this instruction, content teachers can provide for the simultaneous teaching of reading skills and course content." Herber prescribes ways by which students are guided as they develop subject related concepts and skills simultaneously. The main procedure he suggests for successful teaching in any content field consists of a three-part "instructional framework": (1) preparation for study through which purposes are set for reading and technical vocabulary is presented before any material is read; (2) guidance during study consisting of teacher-made study guide materials embracing the literal, interpretive, and applied levels of cognition; and, (3) independent and group activity which provide for individualizing instruction. It is this lesson framework that teachers developed for their students and through it taught process as well as content

while using standardized textbooks.

Among the language arts texts which most teachers rated highly:

Cline, Jay, Ken Williams, and Dan Donlan. Voices in Literature, Language, and Composition 2. Boston; Ginn and Company, 1969.

Dunning, Stephen, Elsie Katterjohn, and Olive Stafford Niles. Thrust (Grade 7) and Focus (Grade 8). Glenview, Illinois: Scott, Foresman and Company, 1969.

Herber, Harold L. Learning Your Language, 1 and 2. Sacramento: California State Department of Education, 1969.

Pooley, Robert C., et. al. Projection in Literature. Palo Alto: Scott, Foresman and Company, 1967.

Potter, Robert R. and H. Alan Robinson. Myths and Folk Tales Around the World. New York: Globe Book Company, 1963.

Robinson, Helen M., et. al. Dimensions. Palo Alto: Scott, Foresman and Company, 1967.

The categories discussed in this chapter continue to grow as more materials to meet the needs of teaching reading in the content areas are generated. The focus of this report has been to describe some of the materials which helped Reading Content Specialists meet the needs of youngsters at the junior high level. The materials included here are those which motivated and provided success for both teachers and students involved in our program.

REFERENCES

Herber, Harold L. and Peter L. Flanders. Research in Reading in the Content Areas: First Year Report. Reading and Language Arts Center, Syracuse University, 1969.

Herber, Harold L. Teaching Reading in Content Areas. Englewood Cliffs, New Jersey: Prentice-Hall, 1970

Loban, Walter, Margaret Ryan, James R. Squire. Teaching Language and Literature, Second edition. San Francisco: Harcourt Brace and World, 1969.

Moffett, James. A Student-Centered Language Arts Curriculum, Grades K-13: A Handbook for Teachers. Boston: Houghton Mifflin Company, 1968.

Spiegler, Charles G. Editor. Strategies: A Supplementary Manual for the Merrill Mainstream Books. Columbus, Ohio: Charles E. Merrill Publishing Co., 1968.

ADDRESSES OF PUBLISHING COMPANIES

Ace:
Ace Publishing Corp.
1120 Ave. of the Americas
New York, N.Y. 10036

AEP:
American Education Publications
Xerox Education Group
Education Center
Columbus, Ohio 43210

Award:
Award Books, Imprint of Universal Publishing and Distributing Corp.
235 E. 45th St.
New York, N.Y. 10017

Ballantine:
Ballantine Books, Inc.
101 Fifth Ave.
New York, N.Y. 10003

Bantam:
Bantam Books, Inc.
666 Fifth Ave.
New York, N.Y. 10019

Berkeley:
Berkeley Publishing Corp.
200 Madison Ave.
New York, N.Y. 10016

Collier:
Collier Books. Imprint of Macmillan Company: Subs. of Crowell Collier and Macmillan, Inc.
866 Third Ave.
New York, N.Y. 10022

Cornerstone:
Cornerstone Library, Inc.
Orders to Simon and Schuster, Inc.
630 Fifth Ave.
New York, N.Y. 10020

Doubleday:
Doubleday and Co., Inc.
501 Franklin Ave.
Garden City, N.Y. 11530

Dutton:
Dutton, E.P., and Co., Inc.
201 Park Ave.,
New York, N.Y. 10003

Falcon:
Falcon Books
Box 8
Riderwood, Maryland 21139

Fawcett:
Fawcett World Library
67 W. 44th St.
New York, N.Y. 10036

Golden:
Golden Press. Imprint of Western Publishing Co.
1220 Mound Ave.
Racine, Wisconson 53404

Harper and Row:
Harper and Rox Publishers, Inc.
49 E. 33rd St.
New York, N.Y. 10016
Orders to Scranton, Pa. 18512

Holt, Rinehart and Winston:
Holt, Rinehart and Winston, Inc. (Subs. of Columbia Broadcasting System)
383 Madison Ave.
New York, N.Y. 10017

Lancer:
Lancer Books, Inc.
1560 Broadway
New York, N.Y. 10036

NAL:
New American Library. Imprint of World Publishing Co. (Subs.of Times Mirror Co.
110 E. 59th St.
New York, N.Y. 1000?

Noble:
Noble and Noble, Publishers, Inc.
750 Third Ave.
New York, N.Y. 10017

Paulist:
Paulist-Newman Press
404 Sette Drive
Paramur, N.J. 07652

Pocket:
Pocket Books, Inc.
Orders to Simon and Schuster, Inc.
1 W. 39th St.
New York, N.Y. 10018

Popular:
Popular Library, Inc. (Subs. of Perfect Film and Chemical Corp.)
355 Lexington Ave.
New York, N.Y. 10017

Pyramid:
Pyramid Publications, Inc.
444 Madison Ave.
New York, N.Y. 10022

RDS:
Reader's Digest Services, Inc. (Division of Education Division of Reader's Digest Assn.)
Educational Div.
Pleasantville, N.Y. 10507

SBS:
Scholastic Book Services, Division of Scholastic Magazines
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New York, N.Y. 10036

Signet Books:
Signet Books. Imprint of New American Library
1301 Ave. of the Americans
New York, N.Y. 10019

Tempo:
Tempo Books. Imprint of Grosset and Dunlap, Inc.
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New York, N.Y. 10018

Chapter Four

Role and Functions of Reading Content Specialist

The reading content specialists had a dual role: (a) to develop and demonstrate procedures for teaching reading in their own content areas and (b) to disseminate and spread the effects of the program throughout the school by consulting with teachers, working with small groups, and demonstrating teaching procedures in their own and in other teachers' classrooms. To fulfill this dual role, the content reading specialists taught their own classes for two-thirds of a day, approximately four periods. The remaining time was then available for consulting with other teachers.

Development of Teaching Reading in the Content Areas

A major effort was made to develop procedures for teaching heterogeneous classes. In each of the four junior high schools in which our program operated (University Heights Junior High and Chemawa in Riverside, Serrano and Shandin Hills in San Bernardino Unified School Districts), classes representing the entire range of reading abilities were organized for instruction. In three of the four junior high schools, these classes were readily arranged, but one of the junior high schools at first insisted on tracking pupils, placing the lowest achievers with reading content specialists. After explaining that the purpose of the program was, in part, to demonstrate that the entire range of students could be taught successfully reading in the content areas, and after the assistant superintendent had intervened on behalf of this aim of the

program, more representative classes were also provided at this school. Consequently, the range of reading achievement in the content reading specialists classes approximated the normal range of approximately eight years, from a reading grade equivalent of 4 to 12. Moreover, the program's heterogeneous classes avoided the stigma usually associated with "remedial" classes or with euphemistic labels, such as "corrective reading," or with unknown labels such as "X", "Y", and "Z" tracks which soon become known. These tracks result in homogenizing the children and the curriculum, presenting a more stimulating and challenging curriculum to the high achievers but a less stimulating and challenging one to the low achievers, which eventually spreads the groups further apart and leads to a self-fulfilling prophecy that justifies in a circular manner the original tracking decision (Balow, 1964).

To teach this entire range of individual differences in reading achievement, five general procedures were utilized:

1. Reading and Reasoning Guides
2. Project Method
3. Self Selection
4. Cross-Ability Teaching
5. Reading through Writing

Reading and Reasoning Guides

The concept of reading and reasoning guides, a teaching procedure for making a single textbook relevant to the classroom's wide range of reading abilities, has been formulated by Herber (1970). The guides consist of three categories or levels of questioning to stimulate students' comprehension of textbook content: literal, interpretive, and applied levels.

The procedure for constructing a guide is to first determine from an assigned chapter what literal information is necessary for a student to know. The basic assumption is that all the information in the chapter is not necessarily important for the student to know. The significant information is then listed on the study guide. The student's task is to determine whether the statement listed is True or False according to the text, and to indicate the page and line in the text where the information is located. The next step is to formulate appropriate interpretations, consisting of integration of two or more ideas. Students then identify which statements are interpretations and determine whether these interpretations are consistent with information in the text. The third category consists of "applications" or generalizations which subsume the interpretations, but may be controversial and debatable. For example, after explaining how the seagull population in Sweden was controlled by tricking the birds into trying to hatch their eggs which had been hardboiled, Herber (1970) formulated the applied statement that man's ingenuity insures his survival. Students in the class then discuss whether this generalization is valid.

The reading and reasoning guide, as formulated by Herber, works well for students who have mastered word recognition processes. For those who have not achieved this level of reading ability, a stage of reading development reached by most students during the fourth to sixth grade level and by some at even an earlier grade level, the reading and reasoning guide needs to be extended to include development of these initial processes of reading. This extension, called a "Learning to Read Guide," consists of teaching the students the vocabulary

of content reading. Each vocabulary item, like a dictionary entry, contains its pronunciation, syllabication, and contextual meanings. Done systematically over a period of a year, the Learning to Read Guide may be instrumental in developing some low reading achievers to a mastery of word recognition. Below is a summary of the extended Learning to Read and Reason Guide:

Guide Outline

Recognition and Word Meaning

Vocabulary (pronunciation, syllabication, contextual meaning)

Levels of Reading Comprehension

Literal

Interpretive

Applied

For those students who are beyond the word recognition level, but limited in their comprehension abilities, the literal level offers them an opportunity for initial success in reading achievement. This level enables these students to get many items correct. Some students had previously experienced only norm-referenced material which aims to maximize individual differences in learning by asking only those questions which differentiate members of a class. With the guide, they found themselves knowing the answers at least to most of the literal items. Previously, they had rarely gotten any questions correct. The guide then, has features of a criterion - referenced "test" which assesses students' mastery of directly taught content and results in positively reinforcing student effort.

For completing the guide, students may form into groups either to fill out the guide as a group or to discuss their answers and debate the interpretive and applied levels of comprehension. Thus, the guide serves as a vehicle for stimulating individual thinking and group discussion. The group discussion process for checking guides and comparing answers also allows for cross-ability teaching, particularly if heterogeneous groups are formed in the classroom. As a further development, students can construct their own guides. Eventually, the end result is internalization of guides and acquisition of processes of reading at the literal, interpretive, and applied levels.

Project Method

Another procedure for meeting the wide range of individual differences in a heterogeneous classroom can be obtained through the project method. This method, used widely in the 1930's and 1940's, requires an extensive library. For each topic covered in the curriculum, books must be available for each level of reading ability in the classroom. Students can then self-select books at their own level of reading ability and use information gleaned from these books to contribute to and participate in class discussions.

The procedure for the project method consists of arousing student curiosity by arranging the room environment through the use of posters, newspaper headlines, pictures, realia, etc. Then, the teacher says, "What would you like to know about the (topic)?" In such an environment, unless they have little rapport with their teacher or are completely jaded by previous negative experiences in school, students are likely to formulate their own questions. For example, the topic or

unit may be "The Westward Movement." With an appropriate room environment, students may want to know why people migrated, what experiences did they encounter on the way, did they improve their standard of living in moving west, etc. The teacher can then have students categorize the questions and form the students into groups according to their own questions. Students can then select appropriate books to answer their questions. Since books are self-selected, variation in reading level is not likely to be a cognitive or affective problem, particularly when good readers may also choose easy material because it answers their questions.

Formulation of questions and reading to answer them enables a student to be actively engaged in the process of learning from texts. In contrast to much instruction in which the teacher formulates questions for students to respond to, thus programming and directing their thinking, the active reader strategy allows for self directions and for divergent thinking. Moreover, it teaches a student how to learn from texts on his own. The student who learns to ask questions and reads to answer them as a process of reading is focusing attention throughout the text. A similar process has been utilized in Robinson's (1946) well-known SQ3R method (survey, question, read, recite, review).

The project method, although useful in social studies and in English equally well, was primarily employed in one reading content specialist's program in his biography unit. Students were given their choice of any of the paperback biographies, which ranged in difficulty for each biography subject. The subjects also varied widely to meet the interests of students. General questions were formulated for all students to read

to answer. These questions focussed on literary purposes and aspects of biography. Specific questions were also constructed for each biography. Students could then meet in groups to discuss both general and specific questions, despite differences in biographies. This procedure is similar to the approach used in Burton and Dunning's (1960) unit on Courage.

Self-Selection

A device used in English classes was self-selection of paperback books displayed on racks provided by paperback book publishers. In a two-period session, students upon entering the room could select and read a paperback book daily for about fifteen minutes. The titles available covered a wide range of topics and difficulty level. Students could also check out paperbacks. Thus, students could maximize their reading time and improve through the process of reading. The value of this approach to instruction has been argued well by Fader (1968).

Cross-Ability Teaching

Heralded in recent years as a solution to individualizing instruction, cross-ability and cross-age teaching has long been used whenever students have been organized into groups for projects, teams, or discussions. Indeed, the entire class with the teacher as discussion leader can be conceptualized as cross-ability teaching. Hence, cross-ability teaching is not a new technique. What may be considered new about it, though, is a more conscious and deliberate use.

In the Content Reading Specialist Project, cross-ability teaching was somewhat systematically used in the organization of groups. The group approach was employed in completion of study guides and in the conduction of projects.

Teaching Reading through Writing

Moffett (1968) has collated a variety of techniques for teaching reading through writing and discussion. Similar to the language-experience approach employed in primary grades for initial reading instruction, teaching reading through writing consists of emphasis upon written and spoken expression of students. Then, students read and discuss their own products and the writings of other students. Because the syntax, vocabulary, concepts, and experiential background are elicited from the student, the only additional component for reading is relating sound to print and using appropriate oral expression. Beside this control over elements of reading, motivation is high, particularly if students have opportunities to experience their environment and write about these experiences.

However, writing as a means to reading improvement has not been systematically evaluated at the junior high school level. When compared with other approaches at the primary grade level, the language experience approach was not significantly better in any of the assessed components than any other initial reading method (Bond and Dykstra, 1967). Consequently this approach, although a valuable teaching technique, is not necessarily desirable for all reading objectives. Other techniques have to be used to supplement it, particularly procedures for stimulating development of vocabulary. Reading literature helps develop not only vocabulary, but also provides vicarious experience, which is necessary for grasping increasingly difficult concepts in a more differentiated, clearer, and better organized manner.

An extension of the reading through writing approach has been developed by one of the Content Reading Specialists, Vaughan Hudson.

In a team-teaching organization in a middle school (Grades 7-8), she has been teaching "writing in the content areas" of the curriculum. Instruction in English, social studies, and science is coordinated in such a way that the compositions in English are on themes and topics concurrently taught in science and social studies. For example, a unit on the westward movement requires biographies on people who participated in wagon train treks across the Plains. Some of the compositions are based on reference reading, but others are imaginative. Thus, writing is used to make concrete and to personalize ideas of social studies and science. In writing, students not only organize their information and ideas, but also give feeling-type responses to events and consequently interrelate cognitive and affective components.

Thus, five approaches were brought to bear upon the problem of teaching content and processes of reading to heterogeneous classes. Each content specialist also employed other techniques and strategies. Some of them were devised by the Content Reading Specialists, while others were gleaned from experts who provided their input to the program.

Expert Input to the Program

Major input to the program was provided by Dr. Harold Herber, Syracuse University. He was the leading speaker in a one-day conference, held on campus at the end of the academic year. The purpose of the conference was to prepare the junior high school faculties for the incoming program. Principals and department chairmen from each of the four junior high schools were invited to the Faculty Club during a regular school day and the school districts were reimbursed for substitute teachers. Our U. S. Office of Education project coordinator,

Helen O'Leary, was also able to attend the conference. The reading content specialists participated in several ways: they interacted with faculty members of schools they would serve in the following fall semester and they acted as consultants to the reading content area workshops held in the afternoon. The conference thus served the purposes of educating the faculties on reading in the content areas, and on the role of the reading content specialist as classroom teacher and reading consultant. The conference thus initiated a transition of the program from the academic to the practitioner realm.

The following was the program for our one-day conference:

9:00am - 9:15	Dr. Merle Borrowman, Dean of School of Education. Opening remarks on the importance of reading instruction in the content areas.
10:00am - 10:30	Film, prepared by Dr. Harold Herber, depicting one of his graduate students teaching a class of students, mostly black junior high school students assembled for the first time for the experimental class, how to read in the content area of poetry. After the teacher read the poem orally, students completed the literal and interpretive level of the reading guide as a class, and then divided up into groups to discuss the applicative level.
10:30am - 11:00	Coffee Break
11:00am - 12:00 noon	Dr. Harold Herber, Discussion of the film, lecture on purpose and construction of reading

guides in the different content areas, including not only the reading and reasoning guides, but also a "structured overview" of concepts in mathematics, as an example of how to provide a class with an introductory overview of the concepts and their interrelationships to be learned during the year (Earle, 1969).

12:00pm - 1:20 Lunch. The conference continued during lunch with discussions organized by having the Reading Content Specialists sit with the school faculty they would be joining in the fall semester.

1:30pm - 3:00 Workshop on using reading and reasoning guides for reading in the content areas. Participants were organized into their content area specialities. Their task, with the help of a Content Reading Specialist as a consultant to the group, was to construct a reading and reasoning guide for a chapter in a textbook currently in use in their schools. Each participant was asked to bring his own textbook to the conference.

3:00 - 4:00 Reports from each of the workshop groups.

4:00 - 4:30 Summary and Evaluation of the Conference by Harold Herber and Harry Singer.

Teaching Plan

Following this conference, the Content Reading Specialists

prepared their own plans for teaching reading in the content areas at the junior high school level. The following is an example of a teaching plan:

Suggested Plan for Teaching Content Reading Skills,

Seventh Grade, 1970

David P. Kahl

I. Diagnosis and Evaluation of General Reading Achievement and Content Reading Skills.

A. Objective: To find the developmental level at which the student is functioning, survey his strengths and weaknesses, and plan a suitable program. Conduct suitable post-tests to measure effectiveness of the program.

B. Means: Utilize information from standardized tests student has taken (Status tests - achievement in relation to peers). Administer appropriate tests of content-reading skills, as available (Step Tests, Cal. Achievement Tests, Athey Personality Inventory, Teacher-Constructed Tests.)

Where needed, administer Gates Reading Survey (Three parts: speed and accuracy, comprehension, vocabulary) and the Gates-McKillop Reading Diagnostic Test (oral evaluation).

Daily subjective evaluation of reading performance by teacher, providing continuous opportunity for modification.

C. Suppositions: That the student-reading process relationship is developmental; continuous diagnosis and learning modification based on that diagnosis will be an important part of helping the student move to the next level of achievement. A

student in need of remediation for severe reading disability should be handled within the context of the total reading program: that is, by a remedial specialist for work on decoding skills. The content specialist should handle the content-reading related skills.

II. General procedures

A. Objectives: To reach those goals in English content determined by existing course of study - (mandated texts, curricula determined by the school, department, and local culture).
To improve all student's content reading skills through individual and group diagnosis, appropriate learning of the needed content-skills, moving from present level of achievement toward next feasible developmental level and beyond.
To facilitate awareness and change of individual attitudes with particular reference to reading and self-concept.
Assumption--reading should be pleasurable and fulfill a fundamental personal need.

B. Method: A combination of the Moffett and Herber approaches (language experience as major growth factor, and reading-reasoning guides as basis for individualized instruction).
Through thinking, speaking, writing, listening, and reading activities which <u>actively</u> include self and peer evaluation (workshops, for example) and small group discussion to extend feedback, the student will use his language, rather than being a passive learner. Creation and analysis of materials read should lead to increased understanding of similar published

forms. Success through participation and lessened competition can lead to increased interest in reading, a first step toward increasing achievement.

Inquiry techniques may be integrated with such a language-experience approach. In group work, the teacher can function reflectively, leading to individual re-working of the concepts and activities with which he is involved. For example, a piece of fiction may be read, acted out, discussed, rewritten--not for literary analysis of its parts -- but for examination of the process of reading related to one's own feelings and attitudes.

Question and answer techniques would not be discarded, but brought more toward the inductive approach: open-ended questioning, sometimes, stacked toward consideration of certain objectives; for example, toward individual examination of one's place within the family unit.

Training of the student in simple group-process and a simplified inquiry model would have to be provided. (Group-talk rules; shorten ten step inquiry model at first to an approximation of defining, examining evidence, evaluating alternatives, interpreting, organizing, and evaluating data, conclusions).

C. Content-Subject Matter - broadly based on ability, interest, and culture.

(1) Wide range of reading abilities to be met by:

a. Written materials produced by the student and used in the content-reading process.

b. As wide a selection of standard reading materials as available (texts, library books, paperbacks, magazines, newspapers, film) in terms of both reading achievement level and cultural content.

c. Written and re-written materials produced by teacher.

d. Group process and exchange of ideas.

e. Reading and reasoning guides suited to varying levels of comprehension, which allow for individual movement from level to level.

f. Parent involvement in the student's process of language experience.

g. Role-playing and imitative activities which involve use of processes transferable to reading process (attention, recall, inference).

D. Potential content-reading skills in English.

(1) Of a general nature

a. Technical vocabulary (short story, modifier, dialect).

b. Data interpretation (affective relationships)

c. Patterns of organization (sentence and paragraph development).

d. Symbols, illustrations (seeing inferences, relationships).

e. Special purposes and motives (realization of literature to experience, language).

(2) Of a specific nature.

a. Cues to word meaning (structure & position; also punctuation and capitalization).

b. Words and phrases in context (location and emphasis).

c. Basic sentence types and modifiers which add meaning.

d. Modifiers appearing more often in certain types of content:

(time in history or science)

(place in physical description)

(manner in means or operations)

e. Sentence meanings (in context)

--literal, figurative, emotional

--intonation patterns

--expressing theory, fact, opinion, feeling

f. Paragraph development (thought pattern and organization).

--facts

--examples

--incidents

--reason/argument

--compare/contrast

--definition

May be ordered by
Chronology--
Space or position
Importance
Comparison/contrast patterns

III. Role as Consultant - to be defined cooperatively within expectations of the junior high school and staff involved.

Content Reading Specialist Activities

During the teaching year, each Content Reading Specialist kept a log of teaching and counseling activities, videotaped a lesson, and evaluated the program. The activities at each of the junior high schools are summarized below.

University Heights Junior High School

Serving as Content Reading Specialists at University Heights Junior High School were Vaughan Hudson and Bonnie Bauman in English and Christina Gutierrez in social studies. Vaughan Hudson returned to this school where she had taught for several years before taking a leave of absence to participate in the program. She returned as a content reading specialist and is still teaching at this school, which has been changed to a Middle School (Grades 7 and 8, only). Bonnie Bauman taught at the continuation high school in Riverside and returned there after the program. Christina taught in Fresno, came to Riverside with her husband, a doctoral student in political science, continued at University Heights as chairman of the social studies department, and then moved to a school in Washington, D.C. when her husband transferred there.

All of the content reading specialists at University Heights conducted a workshop for their faculty.

Workshop on Teaching Reading in Content Areas

The University Heights specialists conducted a workshop for the faculty which was well attended perhaps because the invitation intrigued them. Each faculty member received a written invitation, showing a Sherlock-Holmes figure looking at a textbook through a magnifying glass. The picture was captioned, "Can You Decode Your Subject?". Teachers were invited to the meeting to get clues. At the meeting, they were given a page to read on "Basic Refrigeration Operating" and some questions based on a graph showing discharge

temperature rise at different compression ratios for various refrigerants. The point was readily established: students need to be taught how to read and interpret assigned content. Then the Content Reading Specialists demonstrated use of guides and other activities for teaching reading in the content areas.

The activities of the Content Reading Specialists are summarized below, frequently in their words.

Vaughan Hudson

A. Provided a variety of approaches for the understanding of specific reading material: (7th grade - stories and articles. 8th grade - stories and a novel)

1. Comprehensive questions covering various levels of understanding of specific reading materials: Literal level and main idea, interpretive and inferential, critical and applied.
2. Vocabulary guides and exercises - emphasis on context clues.
3. Exercises on specific skills in terms of the content area of literature: symbols, figurative language, illustrations, devices, motives and attitudes.
4. Writing assignments designed to encourage each student to communicate his own observations, ideas, and attitudes.
5. Puzzles, games and other exercises on specific language skills - spelling, word meaning, word attack skills, distributed, for the most part, on an individual basis.
6. Emphasis placed on the discussion of written and oral responses to reading rather than on grades.

B. Students wrote down their experiences and activities in journals.

C. Students participated in individual study projects in different fields, such as pets, science fictions, magicians. They wrote questions and read to answer their own questions. They kept their own notes.

D. Materials that worked well: Challenger series: self-selection of book, gave question cards on book to groups for discussion, recorder reported discussion.

E. Short stories: students wrote on theme, climaxes, plot.

F. Students wrote poetry and publish poetry book - bound.

G. Students devised a five day curriculum: slower kids read one chapter, learned five words. In most cases, plans were too ambitious.

H. Students learned to take social studies test by formulating questions and practicing writing answers to them in English class.

Christina Gutierrez

1. California Reading Test. Returned results. Students really interested. Picked out specific deficiencies.
2. Used reading guides
3. Games, crossword puzzles
4. Had lots of books--students get answers from different sources--all at different levels of difficulty.
5. Using state adopted texts: Exploring Old World--outdated text, but better than Eurasia

6. Use cross ability teacher--seat good reader next to poor reader. Teacher works independently with some poorer readers.
7. Class activity on skills: context clues
8. Inquiry method--use picture series (Rand McNally). Employed overhead projector
9. If taught year again, would do: more consistent work with groups. Work on large questions--reporting to groups.
10. Do and argue reading guides
11. Projects: Did geopolitical study of school; government, population, vegetation, administration

Bonnie Bauman

1. Using Herber's Reading Guides
2. Taught unit constructed in class on curriculum
3. Originally liked Moffett's approach, but not now. However, can use Moffett's role playing and writing techniques. Did commercial--students wanted to do one again.
4. Used Thrust and FOCUS: read stories, answered questions
5. Had wide selection of paperbacks
6. Used Scope magazine for plays--important for motivation and for teaching oral reading

Shandin Hills

Anthony Bechtold previously taught in Minnesota and Dale Johnson instructed in Southern California, both in English at the high school level. Both taught "social living" classes (combined English and social studies). After teaching at Shandin Hills, Anthony took a

position as reading consultant at a middle school in Poway, California, and Dale returned to his high school which had given him sabbatical leave.

Three Content Reading Specialists were assigned to this school, but one got married and left the program. Anthony and Dale worked in adjoining classrooms and could open the doors to team teach, but did not do so because they needed the smaller group for class control. In their new junior high school, class control was a major problem. By the end of the year, the school had gone through three principals. Nevertheless, the two content reading specialists were able to put their knowledge and skills into practice with students and consult with other teachers.

Dale Johnson

A. Selected paperbacks of Arrowhead Book Co. in every subject area: math, science, history, music, geography, art, home economics, business, etc. Included among the paperbacks were reference materials: dictionaries, source books, etc. After selecting single copies of all the paperbooks Dale and Anthony wanted, they were amazed to find that with a 30 percent discount, the total cost was only $369 for the 817 paperbacks, which they believed covered all the areas for 7th, 8th, and 9th grades. Also they discovered that Fader's Hooked on Books didn't include all the high interest, low vocabulary selections available.

B. Gave pre and post tests on California Reading Achievement Tests. The principal thought this test would also meet the new

requirements for constructing behavioral objectives. Hence, he supported its administration.

C. Allowed students self-selection of paperbacks and free-reading time at beginning of labs.

D. Used study guides.

E. Students acted out plays, based on Scope magazine stories

F. Used Scott-Foresman Projections - read to students. Gave lots of help on vocabulary; students enjoyed stories that were not too long, about 50 minutes.

Anthony Bechtold

A. Herber's and Moffett's techniques were valuable.

B. This year with variety of students we had we didn't rely on textbook at all.

C. Crosswords worked successfully as a motivational device.

D. Used Scope magazine, free reading.

E. Paperbacks were too difficult for one class. Expected too much from them. Used Scholastic paperbacks, Washington Square Press Series, Archway Paperback, Pyramid.

F. Plays work well with Blacks - enjoy action, change in voice and characters.

G. Had control problems with Blacks, individualized, white kids resented what they considered catering to Blacks, objected to noise, wanted to get out and go to library. Black kids want record player on - then they'll sit and work. Girls constantly at loud pitch. This atmosphere is hard on teacher.

H. Used journal writing with some success. Fader's idea: reluctant readers just copy. From writing, they not only get practice but also insight into family relationships, relationships with friends, other teachers, and eventually their own classroom teacher.

I. Had children write on various open-ended topics: "If I were principal of this school, I would . . .", "Today I feel . . .", "The thing I hate most . . ." Read aloud and then correct.

J. Teach listening, especially to each other. Developed a "Listening Guide". Read to class and use a tape recording and have them fill out the guide.

K. Group discussion didn't work, even for burning issues

Chemawa School

Three Content Reading Specialists were at Chemawa. This school emphasized tracking of students. Contrary to a promise of heterogeneous classes, potential school dropouts were assigned to the specialists. After four or five weeks, the assistant superintendent intervened, reminded the school officials of Board of Education policy in favor of individualized instruction, and secured heterogeneous classes for the specialists. Despite this inauspicious start, the Content Reading Specialists, Sylvia Cherry and Richard Zimmerman, English teachers, and Margaret Minor, social studies teacher, were able to carry out the objectives of the program. Sylvia and Margaret had been teachers in other junior high schools in the district prior to entering the program. Sylvia took her graduate work jointly in Spanish and Education, Margaret in History and Education, and Richard

in English and Education. Richard taught reading improvement in other junior and senior high schools before entering our program.

Sylvia Cherry

A. Units on Understanding Ourselves and Others, Folklore and Mythology, Biography, Adventure, Science Fiction and Fantasy, and Inner and Outer Conflict.

B. Used Moffett's techniques: role playing, group talk, topics from reading for panel discussions, journal writing and reading of journal entries, writing in the mode of discourse, dramatizing skits based on reading.

C. Reading plays: discussed ending, writing out ending, acting out ending.

D. Tried uninterrupted reading. Students construct annotated card catalogue for other students: what book is about, what is opinion of book.

E. Discussed picture and had class write poem about being black and proud.

F. Chicano students who needed to express themselves, but didn't care, totally disinterested in school were counseled, given goals a little higher. Now not satisfied with standing outside classroom door for discipline and getting failing grades. They read now, talk into tape recorder, feel school is functioning for them, discuss their lessons, complete their assignments.

G. Held panel discussions on science fiction units, on such topics as "Why are people afraid of science fiction creations?"

H. Studied composition, research, dictionary and spelling, punctuation and usage, sentence patterns, subject-predicture structure, vocabulary skills, and skills for using the library.

I. Individual counseling on standarized reading test results. Some students then wanted to take tests they had previously refused to take.

Richard Zimmerman

A. Biography unit. Work as pair: interviewer and interviewee: write up interview as a biography.

B. Language drill.

C. Multilevel textbook approach.

D. Individualized reading.

E. Writing letters, journals, outlining.

F. Unit on mythology.- introduced reading guides and group talk. Multitext approach. Used panel discussion, group talk, vocabulary, note-taking, art project.

G. Novels: To Sir with Love, Lilies of the Field, Robinson Crusoe.

H. For wide range (A) Scope I, II, III; SRA Pilot Library. (B) Play: "Miracle Worker" - play motivates itself. (C) Used reading guides with Projections in Literature and Dimensions in Literature.

I. Other units: Self concept (Textbook: New Horizons, Projections.) Used reading guides, group talk, role playing, animals and nature (Texts: Dimensions, New Trails in Reading. Developed oral reading using teacher as guide for speed. Silent reading:

used reading guides and group talk. Taught use of glossary, definition through context clues, literary concepts of plot, setting, character imagery, time relationships).

J. For reading in content area did unit on characterization. Also did review unit on plot, characters, setting, theme, symbolism.

K. Minority students responded well in discussion to Sir with Love. Read a chapter a day.

L. Read four chapters to slower students from book they chose, Swiss Family Robinson. They then read five chapters. Had ongoing vocabulary study.

M. Students like "Action Kit," paperbacks.

Margaret Minor

A. Divided class into three groups, each working on a different skill: writing, reading, discussion.

B. Self-selection of reading material.

C. Using reading guides on map study of text, Eurasia.

D. Inquiry lessons on Life in Europe, Case Studies in World Geography, Interaction series. People and Places series was really liked. Also used Junior Scholastic weekly magazine.

E. Students wrote unit.

F. Did test analysis after each unit, held group discussions of answers, kept tests on file for analysis of cumulative errors.

G. Writing exchange - pupils had to write well for each other.

H. Organized groups, which Margaret had not done before.

I. Students utilized the overhead projector extensively for cross-ability instruction.

Serrano School

Jean Fruehan and David Kahl, English teachers, and Patsy Miller, social studies teacher, taught in a new junior high school located in middle socioeconomic district. Jean Fruehan and Patsy Miller had taught in the same elementary school prior to the program. Jean had majored in English and Patsy in Psychology. David Kahl taught English in a high school and coached football before participating in the program. Jean Fruehan stayed on to be chairperson of her department at the junior high school, Dave returned after his sabbatical and leave of absence to his high school in Erie, Pennsylvania, and Patsy is conducting a reading laboratory on a half-day assignment at an elementary school.

Jean Fruehan

A. Work on specific reading skills with low achievers.

B. Used journal writing. Slower students, especially Mexican-Americans, need more sentence structure and language patterning.

C. Some students are hard to interest and to motivate. They like puzzles, mechanical things.

D. Handled individual differences by grouping. Had five groups at first, then 3 - 4 groups. Group leaders kept records. Gave vocabulary exercises together, but separate assignment and reading selection for each group. Low group had English as a Second Language from a tutor. They read selections, participated in discussions, functioned well, and gained in English.

E. Self-selected reading twice a week.

F. Directed reading assignments: one group each time.

G. Workshop in poetry, creative writing, drama activities.

H. Made movies, recordings of poetry, posters, word games.

I. Used reading guides as a basis for group discussion.

J. Lower group had assignments in N. B. Smith's Be A Better Reader workbooks, Scope newspapers.

K. Very low readers: Checkered Flag series - didn't go too well. Kaleidascope Readers has easy stories, Reading exercises and games.

L. For content areas of English used Discovering Your Language. Wrote autobiography. Taught grammar (tense, noun-verb agreement, endings on verbs), particularly to Mexican-American students. They read literally - had good phonics skill, but comprehension was not very good.

M. Employed cross-ability teaching, but difficult to match up personalities of tutors and tutees. One pair carried on for a year - really amazed at progress. They went through programmed phonics (Educational Publishing Services), Harr-Wagner books, kept progress charts. Now the tutee reads by himself.

N. Slow class liked directed reading, experiences before writing, used filmstrips, "Come to Your Senses" to motivate writing. Also found Word Craft for teaching vocabulary worthwhile.

Patsy Miller

A. For wide range of reading abilities, used individualized

reading program for first half hour of every 1 1/2 hour class period. Some read comic books.

B. Read To Sir with Love as a class. Took turns, read aloud - had a book for each student.

C. Used some reading guides, but students need to be able to read.

D. Liked Macmillan Gateways series, records, poems such as "John Henry" and "Casey at the Bat". Also, liked Projection, Be A Better Reader.

E. Some take to journal writing, others don't.

F. Enjoyed plays, role playing.

G. Useful materials were Kaleidoscope readers (Field Enterprises). For low readers: use word lists, sight words, E. D. P. Smith's Visual Tracking.

David Kahl

A. Wide range of materials helped improve achievement: paperbacks, newspapers, "Action Unit" (paperbacks aimed at lower readers), overlaps from Scholastic "Scope" magazines.

B. Cross ability teaching worthwhile, but did not do as much as I had wanted to in this area.

C. Did some charting of progress from "Motivating a Disabled Reader" (by H. Singer and S. Beasley, Claremont reading Conference Proceedings, 1970).

D. Used Fader's Hooked on Books approach: individualized self-selection of paperbacks. Questionnaire at end of year showed students liked having paperbacks available.

E. Herber reading guides - worked pretty well. Useful tool for teaching vocabulary.

F. Moffett approach - language experience, individualized reading program, free choice, different reading levels - is more difficult for teacher to use.

G. Students kept journals. Only checked that something was written each week. Language that is heard is written down.

H. Class wrote plays; dialogues hooked up to role playing.

I. Useful materials: Action Unit, newspapers, magazines.

Summary

Five ways for handling individual differences in reading ability were taught to the Content Reading Specialists: self selection, the project method, cross-ability teaching, Herber's reading and reasoning guides, and Moffett's techniques. All of these were tried by one or more of the Specialists and all of them worked with varying degrees of success. All of the Specialists supplemented these ways with other techniques appropriate to their Content Areas and their teaching styles. Practically all of them found active involvement techniques, such as discussion groups, keeping journals, writing and acting in plays, and oral reading very worthwhile and highly motivating to their students. All of the Content Reading Specialists made video tapes. These tapes were used in consulting and disseminating techniques to other teachers at the four schools in this program and to teachers from schools in the area surrounding the University. The content of the tapes will be summarized in our next chapter on the Reading Content Specialist as a Consultant to teachers.

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Chapter Five

Consulting and Disseminating

Content Reading Specialists were given time during the school day to consult with other teachers. The specialists had two-thirds of a day for teaching their own classes and one-third of the school day available for consulting with other teachers. As the Content Reading Specialists became successful in working with their own classes, it was hoped that other teachers would ask the Reading Content Specialist to work on problems in their classrooms.

To facilitate and accelerate the process of calling upon the Reading Content Specialists for consultation, two procedures were devised. The first was a one-day conference in which the specialists served as consultants to a workshop group composed of some content teachers from their schools. The workshop had the task of constructing a reading and reasoning guide (See description of conference and workshop in Chapter IV). The second procedure was based upon teachers' desires for materials. For this purpose, each school received an allocation of $2500 from the project for materials to be used during the year in the school. A committee composed of community members, teachers, content reading specialists, and the principal worked out a procedure for disbursing the funds. In each school, the Content Reading Specialists had to initiate the purchase order. In three of the four schools, the principal was given final signature authority; in the fourth, a faculty member had the authority. Members of the faculty were then informed that the money was available and a purchase order could be initiated after consultation with the Content Reading Specialist. Thus, through role playing and a "carrot" method or a tangible reward, teachers gradually began to call upon the Content Reading Specialists for assistance on classroom problems.

Also facilitating the consultant role of the Content Reading Specialists were dynamics that operate within the relationship of one faculty member to another. Unlike consultants who are usually housed in a central office and have or are perceived to have administrative authority, including evaluation of teachers, the Content Reading Specialists were on-site as classroom teachers, and had no administrative or evaluative authority.

As the Specialists became successful with their own classes, they developed credibility with their own faculty as teachers who were successful with the same children and under the same teaching conditions. This thought occurred to me while visiting a school one day: a teacher had just completed a visit to Dale Johnson's room, the teacher told me he had wanted to observe Dale because he said he wanted to see how Dale "got more out of the students than I do."

Of course, there was variation among the Specialists in teaching effectiveness and in consulting ability. There was also variety among the schools in receptivity and interest in acquiring new skills. Observation and feedback from other teachers in Shandin Hills, including Dale Johnson, indicated that Anthony Bechtold performed extremely well as a consultant to other teachers, even though he evaluated himself as not being as good a teacher as Dale Johnson. In short, other factors, such as personality, attitude, knowledge, social relationships, and characteristics of other faculty members are determinants of effectiveness in the consulting role.

What may be most important in communication of teaching ideas, processes, and materials is the availability of consultants at a time when teachers need them. Frequently informal discussions in the lunchroom, in the teachers' lounge, after school, or at faculty meeting led to consultations. These ranged from the Specialist working with a few individuals in a pull-out

arrangement, to advice and purchase of materials, to a demonstration in the classroom and systematic instruction in the use of reading guides.

Efforts were made to avoid casting the Specialist in the role of a remedial reading teacher. The requirement of the program for normal representative classes was not only for social facilitation among students or for generalizability of the program to other schools, but also to demonstrate to teachers that the Content Reading Specialist procedures were appropriate and necessary for developmental reading instruction in a normal classroom with typical content. The Content Reading Specialists were aware that "pull-out" programs in which children are taken from the classroom for remedial instruction have not effectively improved reading achievement in the school. Nevertheless, some of the Specialists did some instruction with small groups, but primarily as a vehicle for demonstrating to the classroom teacher how to teach reading in the content areas. Accordingly, the Specialists regularly conferred with the classroom teacher on all aspects of working with the small group: administration, scoring, and interpretation of tests, returning and going over test results with students, setting up objectives with them, constructing charts to plot achievement progress, selecting appropriate materials and instructional processes, including reading and reasoning guides. This guide was sometimes extended to include word meaning and word recognition skills using printed words and content from materials in use in the classroom (Singer and Beasley, 1970). The aim of this approach was to use the pull-out procedure as a means of teaching the classroom teacher so that the effects of the instruction could spread to the entire class (Trione, 1966).

In fact, the procedure described for the small group was also employed to some degree by all of the Content Reading Specialists in their own classrooms. They started off the school year by administering reading achievement and study methods tests to their entire class. The tests were scored by research assistants and returned within a few weeks. The Specialists then went over the tests with their students and counseled them on ways of improving. One of the Specialists wanted to set up reading improvement procedures systematically for all his students, including progress charts, but in meeting all the demands for this new role was not able to do so as much as he would have liked to have done.

During the first semester, the Content Reading Specialists were advised to concentrate on teaching their own classes and learning how to employ recently acquired instructional tools, such as the reading guides. This strategy also took pressure off the Specialists for fulfilling their dual role as teachers and consultants. Hence, they, in turn, did not have to pressure other members of the faculty to consult. During this interim period, the Specialists reached the stage of development with their own classes where they were able to make video-tapes of their instructional processes. These tapes were then shown at faculty meetings, Open House, and at a Board meeting. The tapes, described below, augmented requests for consulting.

Description of Video Tapes
on Reading in the Content Areas

Christina Gutierrez

1. Context clues to word meaning for chapter in text. Three children are called upon for context clues.

2. Questions are then given first, students read to answer, and then prove their answers.
3. Students read for main idea with the use of guide sheets.

Vaughan Hudson

Teaches reading through writing of observations. Students had gone to different places on the junior high school campus, observed, wrote their observations, and returned to class to read their paper. Teacher calls on student to explain. Teacher summarizes. Then a boy begins to read report on smog and pollution.

Bonnie Bauman

1. Class keeps written journal
2. Quiz on vocabulary.
3. Class reads a play - oral reading with expression is stressed. Story is "The Sun Dance Kid". Teacher explains how to read orally with expression. Three students then read in succession.

Richard Zimmerman

1. Students do exercise on suffixes.
2. Teacher introduces a new unit on "people", points out the various books used in this unit. (Variety of books in this biography unit enables students to select biographies on some individual, but on different reading levels.

Margaret Minor

1. Students in map study - complete a reading guide on map.
2. Students form into groups to go over answers to reading guide and discuss answers.

3. Groups meet to go over test on maps, analyze own test. Group is shown going over the test and checking answer in the text. Group leader helps individual members of the group.

Sylvia Cherry

1. Students make entries in their journals.
2. Write sentences.
3. Teacher gives directions on how to participate in a group. Directions are written on board. Students divide up for group talk on "dilemmas", a unit in their current reading. Leader of each group reports its discussion.
4. Videotape ends with follow-up assignment on short story writing.

David Kahl

1. Individual reading: self selection from paperbacks
2. Reading guide completed in group setting
3. Discussion guide for group. Teacher circulates to work with four groups on discussion
4. Reading guide requires students to
   (a) read article on cryogenic process - freezing and rewarming in the year 2071.
   (b) read guide before reading to establish purposes in reading
   (c) check which statements on reading guide are in article.
   (d) first part is literal; second is interpretive; third is is applied: what does article mean to reader.

Patsy Miller

1. Vocabulary words for reading selection on board: deterrent, offense, chronic, dissipated, constitutionality.
2. Reading guide on: "Should Parents Be Jailed for Teen Crimes?"
3. Class reads article aloud, a paragraph at a time, mainly for video audience's benefit.
4. Fill out reading guide individually. A reading guide is shown to audience.
5. Shows discussion group. Teacher goes over reading guide first, then conducts discussion in a group. Next group reads discussion question: Should parents go to jail for something they did not do?
6. Panel reports views on the question.

Jean Fruehan

1. Students talking about literature; dialogue in a poem: "The Hill Wife" by Robert Frost.
2. Class reads poem to answer question: what kind of person is she?
3. "The Smile" by Robert Frost is the next poem. Teacher reads poem to class, then class reads it in unison. Next class does reading guide as one group.
4. Class then participates in a discussion of places to dramatize the poem.

Dale Johnson

1. Self selective reading of paperbacks.

2. Reading and Reasoning Guides completed after hearing a story read to them.
3. Cross ability instruction in going over answers to the reading guides.

Some of the video tapes were shown to the faculty. Faculty members who had not consulted before found out what the Reading Content Specialists did when they saw the tapes and then some of them requested consulting time.

Each Content Reading Specialist consulted in his own style. Although the original proposal envisioned a team of specialists at each junior high school in each of the major content areas (English, Mathematics or Science, and Social Studies), the concentration of Specialists in English (eight), history (two), psychology (one) and Spanish (one) did not preclude in any way consulting with faculty in other content areas, including shop, math, and physical education. Some content specialists consulted more often than other content specialists did, some because of school demands for service and others because of personality.

The following is a summary of some of the consultations conducted in the four junior high schools:

Chemawa

The workshop called early in the year did not attract more than a few teachers. Nevertheless, the content specialists did consult during the year with more teachers than just those who attended the workshop. By the end of the year, the specialists felt that had the program continued for another year, they would have been much more active in their consulting roles.

Sylvia Cherry

1. Tested class's reading ability
2. Ordered math supplies
3. Helped geometry teacher with vocabulary instruction
4. Purchased Concepts in Science
5. Taught reading aide how to use teacher-made materials for teaching word recognition skills

Margaret Minor

1. At first couldn't pin any teacher down, but toward the end of the year some teachers wanted help. Her former junior high had heterogeneous classes, low achievers there preferred to learn from high achievers, but at this school teachers were used to tracking students and were upset by the idea of heterogeneous classes.
2. Social studies teacher learned how to make a guide on outlining main ideas and details. Later he made his own guide for a unit on the Constitution and was using the guide in all his eighth grade classes. He particularly appreciated the level of discussion aroused by the guides.
3. Discussed techniques with a teacher who explained teaching procedure based on "20 questions" game.
4. Provided low level books for World Culture class.

Richard Zimmerman

1. Advised new English teacher who was receptive to new methods on use of all content reading techniques.

2. Exchanged suggestions on teaching literature, reading guides, teaching reading within the content area.
3. Demonstrated math reading guides, emphasized vocabulary, values of group work.
4. Analyzed test results
5. Taught science teacher to construct reading guides.

Serrano

The reactions of the faculty was very receptive to consulting frequently, perhaps because in part it was a new school. But the initial organizational period delayed consultation until later in the year. Then, the Reading Content Specialists conducted a workshop on the title of "Every Teacher a Teacher of Reading". The agenda contained the following outline:

1. Overview of Reading Skills
2. Specialized Vocabulary
3. Aids to Comprehension
4. Finding Main Idea - Film
5. Examination of Materials

The workshop was also given an article on reading skills as they pertain to the junior high school teacher. The article stressed the need for developing decoding (sight words and word attack skills) vocabulary development, (word meaning analysis, use of context clues for inferring meaning, relationships between words), comprehension skills (main ideas, cause and effect, classification, critical reading, compare and contrast, inferential thinking). Stressing that comprehension

skills do not necessarily transfer from one content area to another, the article continued with basic principles of instruction for reading in the content areas:

1. Developing readiness for reading a chapter: relating past experiences, developing key concepts and vocabulary, establishing purposes in reading the chapter
2. Have students use study techniques, such as SQ3R (survey, question, read, recite, review).
3. Teach specific content reading skills, such as reading a graph, chart, map, table.
4. Differentiate assignments according to abilities of students and draw upon multi-level materials whenever possible.
5. Teach specific patterns of writing of the paragraph and article level: conclusion-proof, problem-solving, question-answer and cause-and-effect.
6. Have books related to the content of the course and varying in difficulty available in the classroom.

The specialists at this school were quite busy as consultants (See evaluation, next chapter.)

David Kahl

Worked with a total of five teachers: one in social studies, one in science and three in language arts.

1. Pull-out approach: (a) Individual help with five students from a speech class; methods of reading short story; writing an original scene; group discussion of content material (b) Students from a language arts class--motivational approaches

for the reader below grade level. This approach led to requests for consulting about reading procedures for the entire class (c) Methods of reading the social studies text, use of reading guides, and identification of reading levels for students from a social studies class.

2. Cross-ability teaching approach: Devised cross-ability program for a seventh grade student reading below fourth grade level: words lists, sight vocabulary, progress graphs for self-motivation, sentence-building, providing content material of subject at appropriate reading level.
3. Introduction of content reading skills within classroom: Herber-type reading guides for individualized instruction; group processes based upon reading level organization, materials at various reading levels, instruction of content skills for reading the newspaper.
4. Consulting on materials: provided multi-level materials to science teacher. Other useful materials: "Action Unit", newspaper for low readers, magazines about cars

Patsy Miller

1. Worked with remedial reading teacher, giving Gates-McKillop and WRAT (wide range achievement tests) to approximately 32 children
2. Located multilevel material for free and directed reading in language arts and in science.
3. Pull-out approach, remedial work with two students, practically non-readers, on phonics and sight vocabulary.
4. Ordered word games.

Jean Fruehan

1. Initiated referral for diagnostic purposes and recommendations for reading instruction in classroom in content areas. Discovered one teacher rejected concept of grouping and differentiated assignments as being "unfair" to good readers.
2. Constructed sample reading guide on text, Living Things, for science teacher.
3. Set up cross-ability teaching program with a volunteer, able student to act as tutor to two girls. Procedure consisted of girls' tape-recording short informal stories, transcribing the stories, and then teaching the girls to read their own stories through the use of word cards for words missed. Girls charted progress. Subsequently had to obtain a second tutor and establish a one-to-one relationship.
4. Developed lesson plans and demonstrated how to use the newspaper in a ninth grade class.
5. Ordered word games and installed them in library.
6. Ordered reading materials that would appeal to minority groups and to disadvantaged readers.
7. Work with language arts teachers who are using: Be a Better Reader, Levels B and C for the lowest group, Herber's Learning Your Language for the second group, Challenge and and Counterpoint for the grade level readers in eighth grade, and Adventures for Readers in ninth grade.
8. Gathered material and trained two tutors to work in an E.S.E.A. (State funded) program for low achievers, many of

whom are Mexican-Americans. Selected bilingual tutor to work on figurative language in English and Spanish. Students do exercises in listening, interpreting, and producing ideas expressed in figurative language.

9. Developed library unit for teaching use of Dewey Decimal System. Constructed worksheets for use in class and in library.
10. Developed step-by-step reference reading selection procedure for seventh grade class. Also identified materials (many illustrations, simply written text) for low readers.

Shandin Hills

Dale Johnson and Anthony Bechtold

1. Ordered materials: Teach-Me Science Flash cards for Science teacher, Scholastic American History Program and "Firebird" multi-ethnic series for social studies teacher.
2. Discussed school's switch to ability grouping and use of cross-ability teaching to avoid, to some degree, resegregation within school.
3. Purchased Reader's Digest Science Readers, Gr. 3-6 for science teacher.
4. Explain reading guides and cross-ability teaching at lunch to social living and science teachers and to librarian.
5. Described Scholastic curriculum units.
6. Bought Harper Row Adventure Series for remedial reading teacher.
7. Suggested Scholastic Action Units for a language arts teacher's eighth grade "difficult" boys.

8. Selected math games.
9. Consulted with tutor about materials at second grade level.
10. Acquired Reluctant Reader Library.
11. Showed faculty videotape on Dale Johnson teaching reading in content areas: demonstrated self-selection reading, reading guide, group discussion.
12. Tried to get decoding cards for language master.
13. At midyear, school regrouped homogeneously. Teachers with slow sections now asking for materials. Ordered Reluctant Reader Library, Action Kit, Scope Skills Books, Word Builders, Sentence Builders, Scope Skills Word Puzzles and Cross-words
14. Supplied teacher's substitute with a reading guide in "Read" magazine.
15. Dale Johnson demonstrated in two teacher's classes.
16. Took "Jobs in Your Future" (Scope Skills) to teacher for his occupation unit.
17. Bought Ann Landers Talks to Teenagers for health science class

University Heights

Chris Guitierrez, Bonnie Bauman, Vaughan Hudson

1. Chris found that only one social studies teacher learned to use reading guides; other social studies teachers were not interested.
2. Bonnie reported that materials were well received; some teachers were excited by reading guides but didn't use them.

3. Vaughan explained her approaches to the chairman of English department who tried some of them. She also teamed with social studies teacher for expository writing in social studies. When social studies teacher gave test, students formulated question in English class--the students were learning to take a social studies test.

Dissemination of Instructional Processes for Teaching Reading in the Content Areas

Consulting with teachers was one way of spreading the effects of the program. Dissemination of instructional processes for teaching reading in the content areas to teachers in other schools was one of the commitments made to the U. S. Office of Education as part of the funding for the project. Dissemination was done in several ways:

(1) Reports of the project, given at the National Reading Conference in 1969 and in 1971, were published in the proceedings of the Conference.

(2) A two-day symposium was conducted by Harold Herber, principal investigator of a doctoral training program in reading in the content areas; and Harry Singer, principal investigator of a teacher training program for teaching reading in the content area. This symposium was put on at the International Reading Association's Annual Convention, held in 1971 in Atlantic City, New Jersey. Some 300 teachers, consultants, directors of reading, and professors from all over the country attended the six sessions of one-and-a half hours each session.

The program, reported in the conference Abstracts, consisted of the following:

Syracuse University Project on Reading in the Content Areas
Harold Herber, Project Director
University of California Riverside Project on Preparing Content Reading Specialists for the Junior High School Level
Harry Singer, Project Director
Sessions consisted of: Programs and Problems, Small Group Discussions in each content area led by doctoral candidates, Useful Materials, In-Service Training Programs, Questions-Answers

(3) Symposiums were also conducted at the annual conference of the California Reading Association, San Francisco, 1971, and Anaheim, California, 1972. At the first symposium, Sylvia Cherry gave a slide presentation of materials used in the program. At the second one, Margaret Minor explained her postgraduate program at Gage Junior High, Richard Zimmerman did likewise for his Moreno Valley High School reading laboratories in the content areas, and Vaughan Hudson reported on her method for teaching writing in the content areas for her team at University Heights Middle School. At both of these conferences, attended by some 200 people, Harry Singer explained the project and its major approaches.

(4) A Saturday morning course entitled "Project Literacy", was coordinated by Harry Singer under the auspices of the University of California, Riverside Extension. Into this course, which was taught during the second year of the project, speakers whose ideas were used in the project were brought in for lectures. Approximately 28 teachers plus some of the Reading Content Specialists participated in the course.

The presentations of the speakers are summarized below, along with project ideas contributed by the participants.

Project Literacy

Harold Herber: "High School Programs That Work"

Herber stressed that schooling consists of content, the substance of a curriculum, and process, means by which a substance is acquired. The job of the teacher is to teach not only content but also process. In short, teachers must emphasize not only what, but also how. Traditionally teachers have emphasized only the what. While content acquisition facilitates reading performance, direct instruction is also desirable.

To improve high school programs, teachers may be given instruction in teaching reading in the content areas. Important in such instruction is a change of attitude. Herber's reaction opportunity sheet, containing attitudinal ambiguities, was used for discussion of attitudes. Herber suggested that students also be given "opportunity sheets" sometimes, instead of always having assignment sheets. Students need to mentally wrestle with ambiguities.

The staff needs to do the following:

(1) Think through the curriculum.

(2) Establish objectives. Suggested Gagne's (1965) approach to curriculum: details, principles, concepts.

(3) Determine planning time. Most successful planning times are achieved during school day. After school in-service courses are not desirable because teachers are tired then.

Students need instruction that makes them aware of the structure or organization and interrelations of the content. That is, not just vocabulary, but relationships among vocabulary, as in an overview of the concepts of a course, e.g. the relationships among addition, subtraction, division, and multiplication.

Organization of reading material should also be taught:

Literal--what the author says

Interpretive--what the author means

Applied--how do author's ideas relate to me? What ideas do I have on the subject?

Utilize reading guides. Teach students to read for different purposes. Have students employ different thinking processes, such as convergent-divergent, evaluative, synthesizing. Evaluation of learning should include not only content, but also processes.

Teach students how to take exams. Inform students of the kinds of questions to be asked, what is being looked for on the exam, and the reasons why these questions are being asked.

There are various types of reading instruction:

1. General-reading: skills, such as taught in McCall-Crabbe readers.
2. General-content: Teaching students main idea in a particular content, e.g. main idea in a math text.
3. Content-Reading: Teach students how to read and understand concepts in the content area, e.g. lesson may depend on knowing a particular concept, such as "famine".

Using the above procedures, Herber reported on some of his projects that worked:

Ideal program: study content and craft. Then apply new knowledge and instructional processes in class.

1. Norfolk, Va. Seven schools were involved. School district spent $300,000 to $400,000 in a Title I program on this model of in-service training. Herber worked with staff for three successive Thursdays and Fridays. Substitutes were provided for teachers. Then he worked with faculties in a summer practicum for six weeks. Teachers attended seminars in the morning, and in the afternoon practiced as consultants to other teachers. Stress on teaching content and process together.
2. East Syracuse Project. For a ninth grade school, $17,000 was the cost. Learning Centers with "activity centers" in them were established. The learning center was staffed with three prople: a learning coordinator (graduate student in Herber's doctoral program), English teacher, and central district consultant.
   By departments, staff was assigned to workshop for developing materials, learning content reading techniques for a period of three weeks. Students of these teachers were assigned to the Learning Centers where they were given folders with individual assignments, worked on programmed materials, selected books from supply of 1,000 paperbacks, and received instruction in silent reading. At the end

of three weeks, another department was rotated into the in-service training while their students went to Learning Center. By the end of the academic year, the entire faculty had participated in the instruction. Because the in-service training occurred on-site, teachers could try out new materials and instructional processes during the training. By the end of the three weeks, they had already put into practice what they had learned.

Charles Cooper: "How to Help Students Read Their Textbooks."

Cooper's presentation was organized around references which he then explained and discussed.

1. Paragraph written by the philosopher, Spinoza, to demonstrate to teachers the difficulties students have with textbooks:
    a. Concepts are unfamiliar
    b. High density of abstractions
    c. Meaning is obscure
2. How to help students read their texts:
    a. Difference in reading tasks in science versus fiction. In literature, important facet is aesthetic, personal experience. More like experiencing a portrait than like reading a paragraph in biology.
    b. Literary study in class
        1) Pieces of short fiction may be read aloud by teacher. After reading, discussion or writing based on fiction read.

2) In the English class, you can teach reading by not focussing on it. Teach reading through writing, preferably in the same mode of discourse as the fiction read in class, but the writing should not be about the fiction, but from the student's own experience. Literature thus gets connected with student's own life.

c. Herber's reading and reasoning guide. Structure guide to draw from student what author's ideas mean--the Socratic method simplified. Include in the guide questions pertaining to plot and other elements, such as irony, parody, tone, etc.

d. Use role playing and dramatization before, during, and after reading.

e. If teacher reads aloud in English class, there is no evidence of a reading problem during class. Outside of class, students should read a large quantity of books at appropriate levels of difficulty. Use self-selection of paperbacks for this "free" reading.

f. Comparison of content areas: English and mathematics are similar--both use symbols and skills. Social studies and science are more concerned with content. New curricula stress values in social sciences, empirical methods in science. The ideal is for all teachers to teach reading.

3. Readability. Students were given a copy of the Fry Graph for Readability, which can be found in the appendix, and shown

how to use it to compute readability. The point was made that The Land of the Free, a mandated state textbook, can be read independently only by five percent of eleventh graders. Criteria for application of results of Fry test are the following: If students can read text independently, assign student to independent study group. If students can read text with some help, give specific instruction. If textbook is too difficult for students to read, then use other strategies: put text on tape, seek parental help, try cross-ability tutors.

4. Structured overview of course content (Based on Herber's structured overview).

    a. Structured overview introduces technical vocabulary of the course, concepts to be used in the course. Technique: have students help construct overview from only the list of vocabulary.

5. Reading study approach:

"Reading Technique: Get Your OARWET!" by Maxwell H. Norman, in Successful Reading: Key to Our Dynamic Society, New York: Holt, Rinehart, and Winston. OARWET is an acronym for an organized approach to studying.

Overview (understand title, note main divisions, view pictures, charts, maps, or tables. Find topic sentence in first few paragraphs for central thought)

Ask (read questions accompanying chapter or make up your own)

Read (read entire chapter)

Write (outline chapter)

Evaluate (meaning of chapter, relation of chapter to your experience, critical response)

Test (answer questions posed before reading chapter)

6. "How to Learn", Chapter II from D. E. P. Smith, Editor, Learning How to Learn. New York: Harcourt, Brace, and World, 1961. Emphasizes an SQ4R procedure, a modification of Robinson's well-known SQ3R study procedure: survey, question, read, recite, review--The fourth "r" added to this formula is "rite", that is, reduce questions and answers to a few cue words, better yet, to a few abbreviated words.

   Be aware of five types of paragraph structures: main idea at beginning, at end, only inferred, in the middle of the paragraph, split, or repeated.

   Teach comprehension as an hypothesizing procedure.

   Teaching strategy is to take students through paragraph a sentence at a time, formulate and check hypotheses about main idea as you progress from sentence to sentence.

7. The "R.S.V.P. Procedure of Study", from Chapter Two, R.S.V.P.: a Dynamic Approach to Study by Thomas Staton, Glenview, Illinois. The acronym refers to Review what led up to the assignment, Study assignment by reading or listening to it, Verbalize or say the basic ideas in own words, Preview the next assignment.

8. "Mapping: A Technique for Translating Reading into Thinking", by M. Buckley Hanf in the Journal of Reading, 14, January 1971, 225-230. The technique consists of organizing the information

in an article in relation to the central concept of the article, with the concept at the center of the map and main ideas radiating out from the center.

9. Techniques for reading a chapter were based upon Paul Leedy's "The Chapter--The Unit for Effective Study", from Read with Speed and Precision. McGraw-Hill, 1963. The procedure advised noting the relationship of the chapter to other chapters in the table of contents, note the title and bold face headings, read the summary at end of chapter, skim for main ideas, follow the continuity in thought, list technical and specialized vocabulary review, test yourself, make notes.
10. Students were given an annotated list of texts in reading instruction. This list can be found in the appendix to this report.

James Moffett: "False Problem of Learning to Read". Presentation and discussion centered on two questions: (1) why is it that young children learn to speak before they come to school without deliberate instruction, but when they get to school some have so much trouble in learning to read? The implication is that learning to speak is much more complex than learning to read. Since children have already succeeded in a more difficult task of learning to speak, they should also succeed in the less difficult one of learning to read. Therefore, the problem of learning to read is a false one. (2) The second question consisted of a dialogue with the audience on the question of why reading in school is associated

with failure. The discussion contained these ideas: children are more motivated in speaking,--they need it for survival. Teachers' jobs and teacher success is involved in reading. One member of the audience objected that reading is more difficult than speaking. The discussion centered on the question of whether there is merely a shift from vocal symbols to visual symbols. Reading in the secondary schools is not just a reading problem, but a total school problem. The final discussion centered on the issue of why negative feelings are created about reading; unlike speaking, reading is associated with tests, grading, work, self esteem, group instruction.

Robert Ruddell. "Decoding Programs for Different Dialects." Essentially, Ruddell summarized his project, Developing Excellence in Literacy Teaching Ability, acronymed DELTA. This project, conducted in the primary grades, was reported in a monograph (Ruddell and Williams, 1972) and has already been reviewed. Students in the class received a summary of a Decoding observational Checklist from Project DELTA and instructions in how to use it. The checklist's major categories consisted of decoding content, strategies, or learning processes, and teacher questioning. Procedures for teaching decoding skills can be found in introductory textbooks on reading or in handbooks (Singer, 1970; Heilman, 1973; Spache and Spache, 1969; Hafner and Jolly, 1972).

Harry Singer. "Squeezing a Paragraph"

Using a paragraph from a Reader's Digest Reading Skillbuilder at sixth grade level, Singer demonstrated how to read a paragraph in depth and how to teach students to be an "active reader". The procedure consists of first asking students questions on the main idea, the details, their imagery responses, interpretations, inferences, awareness of literary devices, such as use of figurative language for eliciting emotional reactions and developing suspense, and then switching to having the reader formulate his own questions and read to answer them as an "active reader". Using this teaching strategy, the teacher can thus teach a process of reading, which is a kind of dialogue between the reader and the author. The basic assumption is that the reader can learn to ask appropriate questions and the writer is a craftsman who can arouse questions in the mind of his reader and answer them as he goes. Whether the writing is fiction or non-fiction should not make any difference to the process of reading. The consequence is that the reader follows the thinking of the author, is more alert as he is reading, and since he is answering his own questions as he reads, can store the answers and retrieve them readily. In short, this kind of reading is a process of actively learning from text.

The instructional procedure can be labeled as "Active Reading Instruction." Essentially, the teacher guides the student to formulate his own questions by asking questions which get a question in return. The procedure has been tried successfully at the kindergarten, primary, and intermediate grades (Singer,1970). Instructional

lessons have also been devised for the high school. The same strategy can be used for teaching "active listening".

At the kindergarten level, the following procedure can be used:

In showing the children a picture, instead of directing them to answer questions, such as what is the boy doing in the picture?" which only gets an answer in return, ask the children, "What would you like to know about the picture?". Students typically respond with a variety of questions which frequently diverge in surprising ways from the teacher's expectations. The children's questions reflect their experiences, perceptions, and cognitions. Usually, they are quite eager to respond.

Enthusiastic response to teacher questions that lead to questions occurs throughout the grades. Moreover, the process of reading is quite different. Research to measure the effects of this type of instruction is now in progress at the University of California, Riverside.

Students participating in "Project Literacy" completed the course with a written paper explaining their applications of ideas presented in the course. An annotated list of these reports can be found in the appendix, under the title: "Project Literacy Reports for Teaching Reading in the Content Areas at the Junior and Senior High School Levels, Spring 1971".

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Chapter Six

Evaluation

The purpose of the two-year project was to investigate experimentally the effects of having trained teachers, committed to the concept of teaching reading in the content areas, attempt to improve the reading achievement of junior high school students in heterogeneous classes and reduce the disparity between minority and majority group achievement.

The test results, reported in Chapter One, confirmed only one of the two hypotheses: there was no significant differences between experimental and control groups in reading achievement nor any change in the degree of divergence between majority and minority group achievement. The second hypothesis was that heterogeneous groups did not significantly differ from homogeneous groups in gain in reading achievement. If this hypothesis would have been confirmed, the claim by some teachers that heterogeneous grouping would adversely affect achievement of higher achievers would not have been supported. Unfortunately, grouping practices and changes in grouping during the year precluded an adequate test of this hypothesis. Instead, the project demonstrated that its technique for teaching reading in the content areas could be used on classes varying widely in reading ability.

Interviews of the content reading specialists by an"outside evaluator" and by the project director were also used to evaluate the project.

Outside Evaluation

The U.S.O.E. urges use of an outside evaluator. Dr. Robert Ruddell, Professor of Education, University of California, Berkeley accepted the invitation to serve in this role.

The procedure was to have Dr. Ruddell visit the Content Reading Specialists in their school settings, discuss the project with them, the principal, and other teachers in the school. The summary, based on notes taken at the conference by our supervisor, Frances Arnold, is reproduced in the appendix.

The conferences revealed interactions among schools, personnel, and ways of consulting. In Serrano, the school where consulting worked most successfully, the concept of teachers serving as consultants for other teachers was identified by the principal as the reason for the success of the program. The consultant's strategy of first working with a small group of individual students and then progressing to demonstration of teaching guides for reading instruction for the entire class worked well. The teacher in the conference at Serrano was president-elect of the San Bernardino Unified School District's teacher association. He said he expected to spread the concepts of the program to other junior high schools.

At Shandin Hills, the conference members visited the rooms of the two Reading Content Specialists. By chance, they met a teacher just leaving after a visit to Dale Johnson's room whose teaching he had just observed. The teacher told us he had observed Dale to find out why Dale got more performance out of the same students.

At University Heights, consulting had been less extensive. But the principal was nevertheless very supportive of the program.

At Chemawa, despite a delayed beginning, the Reading Content Specialists had managed to work with three teachers each during the year.

Report to the Board of Education

Riverside Unified School District

Towards the end of the second year of the program, a report was given to the Board of Education on the progress of the project. The Riverside Reading Content Specialists were in the audience and were introduced to the Board. Afterwards they participated in answering questions. One of the most significant, a question raised by the President of the Board, Arthur Littleworth, was whether materials purchased in the program were not already avilable in the schools. The answer was that most of them were, but they were not circulating well or teachers did not know they were available. The full report, located in the appendix, contains information on all aspects of the program plus ideas on how to continue the program with and without extramural funds.

A report of the test evaluation was sent to the Superintendent of Riverside. Although the results revealed no statistically significant differences between the experimental and control groups, he nevertheless planned to pursue the idea of preparing teachers for teaching reading in the content areas.

Interviews with Reading Content Specialists

The project director individually interviewed all of the Reading Content Specialists at the end of the two year program. The evaluations covered the following topics: the University's instructional program, teaching reading in the content areas, reasons for disparity between majority and minority groups achievement in reading, ways of consulting with other teachers, and homogeneous versus heterogeneous grouping. Instructional processes and materials for teaching reading in the content areas have already been covered in an earlier chapter. The other questions will be answered below.

University Instruction

When asked what they would like to see in the University's instruction, if we repeated the program, all of them emphasized elimination of the requirement that half of the course work be taken in another department. They found that courses dealing with secondary reading, diagnosis and improvement of reading, and construction of curriculum units most worthwhile. The secondary course included establishing scope and sequence of objectives, determination of relevant materials, techniques for developing skills and abilities, such as for vocabulary development, how to teach students to learn from textbooks, measurement of reading difficulties, procedures for reading a chapter, such as reading guide and SQ3R technique, role playing method, group talk (problem solving assignments worked out via group talk, such as how to teach students to read a particular article: vocabulary, reading guides, group discussion for students, audio-visual materials to use, motivation for reading). The

diagnosis and improvement of reading course concentrated on procedures for administering tests, diagnosing and determining expectancy levels, and individual improvement of reading ability (Each person worked individually with two or three junior high school students). The curriculum course taught various instructional processes, such as inquiry and Socratic techniques, establishment of behavioral objectives, and culminated in development of two week units on "Ecology", "Power", etc., which Specialists in teams of three to a class then taught.

Some Specialists had elected courses in Black literature, the Mexican-American child, and in language development; they considered these elective courses useful to subsequent instruction. Most of them wanted more time to plan, select materials, observe other teachers, know literature, learn more about techniques for individualizing instruction, organize units, work with low reading achievers, and prepare for the teaching year.

Consulting

Consulting activities varied; at one extreme, the Reading Content Specialist reported: "couldn't pin any teacher down to more than suggestions." However, the Specialist concluded: "Towards the end, some teachers were beginning to change and wanted help." This evaluation implied that another year of the program would have resulted in some Content Specialists being more active in the consultant role. (Indeed, in their third year, several of the Content Specialists had positions in consultant or administrative roles.) At the other extreme, Reading Content Specialists demonstrated the concept of a teacher as consultant was indeed valid not only in their self

perceptions, but also in the eyes of other teachers and the principal. In fact, these Specialists suggested a plan that would probably have made the Consultant role more workable: two consultants combine to work with one teacher--one consultant to demonstrate and provide release-time so that the classroom teacher would have time to work with the second consultant on techniques and preparation of materials for immediate use in class.

Majority vs. Minority Group Reading Achievement

A major thrust of the program was to try to reduce the gap between majority and minority group reading achievement. Although the project did not accomplish this objective, the Reading Content Specialists were nevertheless asked what they thought might account for the disparity.

The responses varied considerably. At one extreme, the disparity did not "show up". At the other extreme, the differences were formulated into generalizations: the Blacks were characterized as being more physically oriented--"they want to be up and around all the time". The Specialist found this desire for physical activity could be channeled into putting on plays. But white kids then complained about not getting speaking parts in the plays as much as the Black students. The Black students also wanted the record player in the room going while they studied. Development of this "noisy" atmosphere in the classroom became a focal point of conflict: white students complained about the noise and avoided the classroom when they could by going to the library.

The observed disparity may have been a function of teacher attitude based on previous experience with white middle-class children "who sit in their seats and spoke when spoken to." That is, this Specialist had an expectation that instruction should take place in a quiet atmosphere, which he was more able to achieve in his "writer's workshop". In this activity, students were given open-ended questions to write on such as "This summer I plan to ..." or "If I were principal of this school, I would...". Students also read descriptions, then wrote "Guess Who" descriptions of other students in the class, and eventually description of themselves. They also took a conflict situation and wrote dialogue. Eventually they wrote a short story about a person like themselves. Also he found "Listening Guides" constructed as an analogue to "Reading Guides" with the teacher reading a story or article and students answering questions based on three levels of comprehension to be lessons that controlled his class and taught students to listen to each other.

The variation of response to the disparity question may have been more a personal reaction of the Specialist to his own instruction and control of his class. Another Specialist in the <u>same</u> school who was perceived by his colleagues and his students as an outstanding teacher taught his students to use reading guides, but felt he had to maintain control by using group rather than individual instruction. He had previously used individualized instruction in a high school. This Specialist attributed his success to his attitude: "accept, trust children." He used "free time" as a means of control. After work was done, students had free time. If they received "bad behavioral

reports," for example from the librarian, they relinquished some free time for clerical activities. This Specialist also gained rapport with his class by assigning on a weekly basis responsibilities within the classroom, such as roll-taking, classroom librarian, etc. He found that "Listening Guides" enabled him to gain control of his class, and that his students learned to use these guides so well that he was able to leave the room after reading to the students and they would complete the guides on their own.

What may be discerned from the responses of these two specialists is the hypothesis that the disparity in achievement in reading increases as a function of low achiever's inability to compete and accomplish academic tasks. Frustrated, they avoid such tasks by walking about the room or talking to each other. Reading guides, particularly in groups where cross-ability teaching can occur, reduces frustration, fosters task orientation, and consequently helps all children improve in achievement.

However, reading guides are not a panacea. Other techniques to overcome frustration are self-selection, cross-ability teaching, listening activities, and group instruction geared to the achievement range of the group. Regardless of individual differences in overall reading achievement, students need to learn advanced word recognition techniques, including pronunciation of foreign words frequently found in the American language, more extensive word meanings, and more complex ideas as they progress through the grades.

Another factor which probably exacerbates the disparity between majority and minority achievement is the attitude of the teacher and

his perception of class responses. If his attitude is to integrate his students, accept and trust students as individuals, he is not likely to intensify subcultural differences nor elicit negative responses students have learned in previous classes where teachers consciously or unconsciously stereotyped behavior and increased racial cleavages.

Other than instructional ability and attitudes of these specialists, we did not gain additional insight into disparity between majority and minority group achievement from interviews with the Specialists. Our basic assumption is that general capability is normally distributed in whites and blacks and other minority groups. Hence, achievement with these groups should also be normally distributed. That is, the means and range of individual differences in the majority and minority groups should be equal. Since neither tests of capability nor achievement are infallible, our basic assumption cannot be unequivocally tested. Nor did we succeed in obtaining through our experiment any evidence to support our assumption.

Ways of Consulting. The Reading Content Specialists developed their own styles for consulting with other teachers. Among the styles were (1) demonstration teaching, (2) help with attainment and utilization of materials, (4) extensive use of faculty lounge and preparation time for "sharing" ideas, (5) individual instruction in teaching techniques, (6) extensive and intensive help to beginning teachers and teacher aids, (7) work with individuals and small groups "pulled out" of the classroom, primarily as a means of using such students to demonstrate credibility and gain acceptance for working with the teacher

and his entire class. Towards the end of the year, some of the Specialists hit upon the idea of two of them working with one teacher: one Specialist to demonstrate and relieve the teacher who could then plan a lesson with help from the other Specialist.

Ideas for consulting with teachers were also gleaned from Dr. Verdun Trione, University of Nevada. In one day, he visited all of the schools, met with staff at the school sites, and completed the day with a seminar for the Content Reading Specialists in the late afternoon. His report, reproduced in toto in the appendix, contained the following explanations and recommendations:

1. Project Teachers have internalized the role of consultant, defined as bringing about modification in teacher behavior through operant conditioning techniques. Essentially consultants operate by explaining materials or techniques to teachers, have them use the new behavior, and then underscore or feedback favorable pupil consequences.
2. Logs of conferences enable the project teacher to justify his role and perceive causal sequences. These logs, however, should be kept daily and analyzed regularly.
3. Consultants and principals are anxious for results. The results should be made more visible whenever they occur. The project's supervisor and director should emphasize results as they occur and communicate them to other teachers and to principals, as well as project specialists.
4. Whenever change in principals occurs, as it did in three of the four project schools, explain the nature of the project and his role in it to the principal.

5. Timing is important in any relationship. Supplying materials to teachers is safest in the beginning. Later, change in teacher behavior can be emphasized. The latter can be based on the model of professionals consulting with each other and modifying each other's behavior. In general, there is a continuum of such behavior: compliance, identification, internalization.

In general, this outside consultant recognized the complexities of the project teachers' consultant role, their preparation and training for the role, the progress made in fulfilling and internalizing the role, and the need for more time to carry out the role.

Homogeneous vs. Heterogeneous Groups. Schools "track" students, that is, assign them to a particular group (X,Y, or Z) for all of their subjects on the basis of a single factor (IQ score overall or achievement in a subject, such as reading), because they believe the procedure results in "homogeneous" groups which facilitate instruction and yield a greater degree of achievement. An assumption in homogeneous grouping which is frequently voiced is that "slow students won't drag down the fast students," yet it is known that "homogeneous" groups are not really homogeneous (Balow, 1962). At best, the specific subabilities in such groups are reduced in range by only twenty percent (Cook, 1957). What homogeneous grouping is likely to accomplish is an adaptation of the curriculum to the various tracks and the resulting attainment of a self-fulfilling prophecy as the disparity between the tracks increases (Balow, 1964). Also,

students in the "lower" tracks feel stigmatized, while students in the "upper" track believe they are members of an elite group. Feelings of self-depreciation in the lower track and over-confidence in the upper track ensue from the grouping process and teacher attitudes toward their groups.

Interviews with the Reading Content Specialists revealed that tracking practices are firmly engrained and difficult to modify, even when teachers want to change the practice. In one school, some six weeks went by before the Content Specialists attained a representative group of students. During that time, they noted the discouragement of students placed in a group of low achievers, particularly one boy who refused to attend school unless placed in a regular class. At three of the four schools, representative classes were attained for the Content Reading Specialists by giving them tracked classes which in toto constituted representative classes. In the fourth, a new school, the faculty voted to start out with heterogeneous classes, but at midyear abandoned the plan and reorganized to attain more "homogeneous" classes.

How did the Content Reading Specialists who had techniques for teaching heterogeneous classes perform? Their ability to perform was not adequately tested. At the school where the faculty had originally voted for heterogeneous groupings, the Content Reading Specialists argued against the change to homogeneous grouping, not just for instructional reasons but also for social purposes, especially for preventing racial resegregation in the school, but to no avail. The switch from heterogeneous classes to ability groupings did not appear to affect classroom behavior. All

of the other Specialists had tracked classes. Although they tried their techniques for heterogeneous classes upon their groups they didn't gain the experience of utilizing them upon a completely heterogeneous class unless it was drastically reduced in size.

Regardless of mode of grouping, a range of ability exists in any class. Reading and listening guides, individual assignments, and cross-ability teaching helped meet the range of individual differences. Although the project specialists demonstrated that they could use their techniques to cover the wide range of individual differences found in junior high schools, the inability of their schools to provide heterogeneous classes for the entire year limited their experiences to representative, but tracked classes. Hence, in only a limited sense did the project demonstrate the utility of its wide range techniques. Apparently, more far-reaching changes in school organization are necessary before truly heterogeneous classes can be realized.

Summary and Conclusions

The training program for preparing Content Reading Specialists was a two-year pilot project. The first year was spent on recruiting and training twelve experienced teachers to operate as Reading Content Specialists. In the second year, they applied their training by serving in the dual role of teaching reading in the content areas in their own classrooms and spreading the effect of the program by consulting with other teachers in their schools. Three content specialists were placed in each of three junior highs and two were in a fourth junior high school.

In their roles as classroom teachers, the Content Reading Specialists employed a variety of techniques for teaching both processes

and contents of their subjects. Prominent among the techniques were reading and listening guides, cross-ability teaching, self-selection of reading materials, and group discussion. The project method with its emphasis upon self-formulation of questions and reading to satisfy one's own purpose in participating in the class's unit was not utilized on a large scale by any of the Content Reading Specialists.

The techniques used by the specialists were communicated to other teachers. Especially useful for such communication was release time for teachers to attend a one-day conference. This conference was held for principals and chairmen of the four junior high schools. At the schools, considerable time was spent in selecting and disseminating materials purchased with project funds. This form of consulting led to instruction in other procedures for teaching reading in the content areas. So did pull-out type instruction with small groups.

Large group consulting was also utilized; particularly successful was the use of workshops and video-tape demonstrations. But, these modes of input could only initiate change in teacher behavior. Any complex modification in behavior requires reinforcement, either through confirmation of an expected objective or satisfactory group reaction. This modification was attained in those classes where a Content Reading Specialist worked with a classroom teacher over a period of time.

Dissemination of materials and techniques was a major accomplishment of the project. The materials, evaluated and recommended by the Content Reading Specialists are listed in this report. They have

been added to the library collection at the University of California, Riverside, are available for training teachers, and can be checked out by teachers in the Riverside-San Bernardino areas.

The pilot project lasted for only one year in the schools. As a pilot project, it did not succeed in significantly decreasing majority and minority disparities in achievement, but it did accomplish other purposes. We learned what courses and instruction ought to be included in preparing reading content specialists. A review of the research and discursive literature indicated our present state of knowledge on teaching reading in the content areas; particularly the review of research (Chapter Two) revealed a need for much more research in this area, at all grade levels. We discovered some ways of transferring a program from its University setting to the public schools, primarily through release time for conferences and for consulting in schools. The concept of teacher-consultants appears to be a viable one.

Although the pilot project did not become a full scale program because of curtailment in U. S. Office of Education funding, the project has led to some capital gains. The Content Reading Specialists have disseminated the program's ideas and are continuing to do so in their roles as supervisors, consultants, and classroom teachers. The materials and strategies developed in the program have been incorporated in the University's training program. All of the participants in the program realize that teachers at all levels have to instruct their students in both content and processes. The ideas, materials, techniques, consulting and dissemination procedures gleaned from our review of the literature, professional consultants,

plus materials and ideas developed or applied by our specialists appear to be a useful fund of knowledge to draw upon in teaching reading in the content areas.

The disparity in achievement between our majority and minority groups was not significantly decreased in one year of instruction. This disparity had accumulated over a six year elementary school period. Obviously, attempts to prevent this disparity will have to start in the early years of the elementary schools. Attempts to overcome it in the upper grades will have to persist for at least more than one school year in order to be successful.

Counteracting ameliorative efforts to reduce disparities in achievement are tracking and grouping practices which stigmatize children. Since individual differences in capabilities cannot be eliminated, ways will have to be devised to organize schools so that negative affective concomitants of relative achievement are not fostered by grouping practices. Concepts of mastery learning and continuous progress, if applied to specific achievements, may accomplish the goal of handling intraindividual and interindividual differences in capabilities and achievement. Furthermore, if rate of achievement in mastery learning does not become a stigmatized substitute for tracking practices, interference in academic achievement is less likely to occur from organization of schools for mastery learning and continuous progress. Under these conditions, significant differences might occur from teaching reading in the content areas.

Although the pilot project did not blossom into a full scale project, it did provide funds which were used to purchase some $10,000 worth of materials for teaching reading in the Content

Areas at the junior high school level. These materials are now housed in the library of the University of California, Riverside. They are available to teachers in the Riverside-San Bernardino area, as well as to students at the University. The materials are also crucial for a course in secondary reading, taught at UCR. And for students enrolled in the Reading and Language Development Program now offered at UCR. All of the Content Reading Specialists are putting their training to work in middle or junior, and or senior high school. At the end of the pilot project, the State of California, under the Ryan Act for teacher credentialing, initiated the requirement that all candidates for a teaching credential, elementary and secondary, must take a course in reading instruction. Now, all credential candidates at UCR learn to teach reading in the content areas. Hence the project realized its objective of using EPDA funds for the U. S. Office of Education as "seed" money for developing an institutional program for preparing teachers for teaching reading in tne content areas.

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APPENDIX I

A

Consultant Report on the
University of California, Riverside
Project for Preparing Reading Content Specialists
at the Junior High School Level

Date of Visit: November 20, 1970

Consultant: Dr. V. Trione, Associate Professor of Education, University of Nevada, Las Vegas

Objectives: 1) To visit project schools
2) To conduct seminar with project teachers on consulting with classroom teachers.

I. General Observations During School Visitations
The consultant visited four junior high schools. He had the opportunity to visit briefly with eight project teachers on site. The consultant also met two principals (one a recent appointment).

During the visitations the consultant identified roles performed by the project teachers and several characteristics of project teachers' performance:

A. Roles performed
1. A source of materials for other teachers
2. Resource to the faculty i.e. "brain picking".
3. Field testing of materials and methods (models)
4. Participant-evaluator role of student performance
5. Participant planning development with teachers
6. Counseling

B. Characteristics of project teachers performance (as related to above roles)
1. Selecting a variety of materials. The Reading Content Specialists are seeking materials which may meet student interests and needs. Varied materials helps the regular classroom teacher to motivate students and organize instruction better.
2. Feedback. Teacher habit systems with those of project teacher are tested by sifting and exploring ideas, and by suggesting advantages of disadvantages of certain approaches and/or materials. The feedback mechanism nevertheless does not interfere with the regular classroom teacher's freedom to be self-selective and autonomous.
3. Field testing of models. People learn from models. Further, learning is apparently more stable when the emphasis is on process rather than product. Models provide feedback on specific outcomes, including errors and successes.

* See Wallen and Travers (Chapter 10) Handbook of Reasearch on Teaching for principles of consulting.

4. Participation in Evaluation. This offers systematic attention to student performance. It clarifies and reinforces appropriate instructional planning behavior.
5. Participant Planning. Sharing expertise with another teacher offers opportunity to develop change in behavioral organization. Both participants are in a position to develop new patterns, principles and relationships. This is an extremely important field vehicle for transfer of professional learning.
6. Counseling. Vance and Volsky[1] emphasize that when professionals counsel each other, they reflect, redirect, offer information, analyze and reinforce each other. A teacher-consultant also helps the classroom teacher differentiate his or her own skills or teaching systems. This differentiation then can lead to behavioral reorganization.

Most of the project teachers are not aware that they are performing all of the above characteristics of their roles. It may be just as well, since such lack of awareness suggests their ways of performing are already a part of their "professional personality".

Teachers from the project have been astute in not "pushing their wares". Rather, they seem to be achieving rapport through cautious reinforcement of their aforementioned roles. They apparently try to instill confidence, self-respect and professional pride in other teachers. In short, they are structuring a co-consulting situation where both participate as teachers, sharing each other's expertise. Deese[2] has aptly suggested that such a relationship aims at the process of developing discrimination about one's own behavior. Each project teacher can, therefore, help relieve teacher discordance about self.

The project teacher can effect change in teacher behavior in the following steps: first accept present teacher skills (no matter how imprudent they may be) before suggesting qualitative change. This is the first break-through in changing habit strength of another person. Then redirect by suggesting new attention behavior and allow for trial and error or reinforcement. That is, the teacher's behavior operates upon the environment and may result in favorable consequences. In short, consulting of this kind is really application of behavior modification to teachers.

So much for the above theoretical interpretation of observed field events.

The project teachers are still naive in their role and self-perceptions of their newly devised skills, and are still in a process of reorganization. The project teacher is anxious, somewhat uncertain

[1]Vance and Volsky, "The Repeated Interview", American Psychologist, 1964.

[2]Deese, J. Psychology of Learning, McGraw Hill.

and relies on the "shotgun" effect. Rather, they should take advantage of the "ripple effect" with one or two teachers. Be successful with one or two teachers and yet be available to others. Make "visible" what you are doing with responsive teachers. It was evident in two schools that consultants were successful, but without fanfare. The project supervisor could play a stronger role in helping the consultant process by passing the word around to other teachers and by advising principals what is occurring.

The safest position the project teachers can assume are (a) offering materials, tools, and techniques (b) working within the competence of the teacher, initially (c) developing an understanding of the teacher's problems and class (d) acting as a validator of teacher thinking.[1]

Project teachers will need to develop diplomatic amenities, a "soft sell", and a "tough administrative hide" for rejections. Rejection of services offered, however, seem to be diminishing. For increasing their effectiveness as consultants, project teachers will need to develop a sense of timing and acquire a time-perspective on rate of change in teacher behavior.

It will occur.

II. Seminar With Project Teachers

The conferences with the teachers dealt with two major concerns. The first concern is not what to do, but how to do it. This question can be answered by recognizing how teachers' behavior may change.

Using Ted Hall's paradigm from his book, The Silent Language, Project teachers must be alert when Compliance, Identification, and Iternalization occur. These are on a continuum. For illustration, when a teacher approaches a project teacher and asks for help, he may be only complying with something he heard at a faculty meeting. So, he's just "shopping around" and "really doesn't believe it". On the other hand, if the teacher begins to take a liking to the project teacher, or materials and techniques he offers, identification is apparent in this next step for reorganization of behavior. However, if the teacher begins to utilize the tools and techniques of the project's teacher-consultant and develops his own performance objectives, then indeed, he has internalized and has made the consultant's expertise part of his teaching style.

Any new approach that succeeds for a teacher is reinforcing. Modification of behavior then occurs. To attain this goal, counseling must be first aimed at reinforcing an existing skill and not responding to inappropriate teaching. The project teacher, if alert to behavior that is reinforcing, can strengthen this behavior by emphasizing it. Favorable consequences are then more frequent. This favorable behavior can be "feedback" to the classroom teacher. Thus the project teacher can encourage the teacher's adaptation and adjustment to the classroom.

[1]See V. Trione, California Journal of Education Research, March 1967, for further explanation of this point.

The second area of concern is the project teacher's log. Apparently logs have not been kept well.

The log as a retrieval instrument is probably the best way to justify the project teacher's existance.

a. It is a record of activities.
b. It is a "tracking system" of sequential teacher action.
c. It is a visible record of professional services.
d. It is both a qualitative and quantifiable record of project impact on schools.

Appendix I of this report provides illustrations of what log entries should be. A one-time per day summary is sufficient. One may want to consider taping for more detailed information. Whatever method is used for maintaining a log, analysis can be made (See Appendix II Model) to show impact as well as methodology, including meeting teacher differences.

III. General Impression

Despite some realistic constraints, this project is moving along at an excellent pace. Personnel reflect excellent selection and training. The host schools and administration are markedly interested and supportive of the project.

Project personnel are in a state of adjustment. Evaluation will determine the level of impact.

IV. Administrative Characteristics in the Project

Of the four principals who started with the project, only one has continued as a principal. The consultant only had opportunity to interview one new principal and another who had been in a principal's position for several years. Considerable time was spent with the newly appointed principal who had obvious, but perfectly understandable, anxiety about the project. Despite the consultant's interpretation and response about the project, the Project Director and Supervisor should reinforce and assist the principal. He is sincerely interested and most conscientious about doing his job well, which is commendable. However, to this consultant's interested eye, he suffers the same pangs as the project teachers, i. e. wanting instant results. The obvious answer to help both parties is to make the project more visible. With the aid from the Project Director and/or Supervisor, the principal should collect systematically evidence on what is being done in the project. This can be categorized and placed into appropriate school board and faculty reports.

Nevertheless, the consultant cautions against exaggerated or overstressed reports. Time is an important factor in this project for

adequate data retrieval. Observations, conferences with other teachers and cross validation observations by an outside principal from another project school are orderly methods of retrieval, including project-teacher logs.

Another aspect of the project is the sense of pride and autonomy the project teachers have. This is of real credit to those who originally selected the project teachers. They may sometimes be looked upon as "mustangs" - - - and hopefully so. This group, by and large, reflects an espirit de corp that any level of management should appreciate. They reflect excellent training; they are energetic, creative, and possess pride in their position. (Frankly, if no one wants this crew next year, the consultant will be happy to hire them in a forth-coming project. However, the consultant doubts that this wish is even a probability since the principal who began with the project already sees her appointees as part of the staff now, and also for next year.)

V. Recommendations

1. Stress log entries by project teachers on a daily basis.

2. Assist project teachers in "sharpening" their consultative techniques i.e. communication skills.

3. Assist newly appointed principals by interpreting objectives of the project and explaining to principals their critical role for its success.

4. In ongoing evaluation sequence, interview a sample of teachers in project schools to determine impact of the project.

APPENDIX I
"Teacher Log"

October 16, 1970 - Conference with Teacher in hall. Discussed reading part of CAT with teacher (Mr. D). Mr. D had no real trouble spots in his group. Reading seemed to range or distribute itself evenly. He was interested in "up-grading" his group however. Later looking over his room, there appeared to be a paucity of supplementary materials, for both low and high readers. Mr. D did a great deal of committee work, but there was little in the way of independent activities. It was also suggested that he share with each child the findings of his achievement test. This might offer leads for independent activities. Also suggested Chapter 11 in McKee's book. Discussion turned to "emotional problems and reading". Project teachers discussed what research revealed--that there was little relationship--that good readers requently had similar adjustmental problems (Robinson's work) of poor readers. Project teacher also pointed out that nothing succeeded like success and that simplified and increased success could have an effect on adjustment of children.

October 23, 1970 - Project teacher suggested to Mr. D that he, the teacher, outline with his group what is to be done the following week. On Monday a review of objectives could be made. He could have a set of free reading materials for the "low" group sent to him. For the high group (Mr. D only used two groupings in his room) project teacher suggested consistent committee work since this was Mr. D's Forte. Suggested this group develop a unit of summarized stories or writing plays from what they read. This would make an excellent language arts experience. In this way, the lower group could participate and contribute as well.

November 1, 1970 - after school, teacher and Project teacher made analysis of CAT sub-tests. Found all areas of vocabulary and that of following directions were 2 grades deficient. Project teacher gave simple demonstration of the Substrata Factor theory in reading. Suggested use of S. Kirk book for her low readers pp. 138-43. Use of Moffet book for techniques. Indicated how the lack of following directions might easily be related to deficient vocabulary-i.e., lack of word sense and poor range of information.

Also suggested how teacher could share results of achievement tests with children in class.

Nove ber 9, 1970 - Mr. F and Project teacher discussed effects of reward and punishment. Mr. F feels one needs a balance of both. Project teacher suggested it may be relevant to the nature of reward and punishment be regarded as "reinforcers" in that each can be relevant to a set of consequences which confirm interpretations of fulfill needs. Mr. F reflected and concluded that the R & P method should not be construed as "black or white". Perhaps the attitude of the teacher was the best weapon as he called it and that whether R or P was used, interpretation should be given. Nor could he see where a child should be forced to continue a task when he did not have the appropriate skills. A child had to be taught alternate reponses in order to attack a problem. Project teacher felt a little nonplussed at this "closure" and insight. (Good thing I kept my mouth shut.)

APPENDIX II

Descriptive Tabulation of Consultant Services with Nine Teachers

As Related to Areas of Educational Psychology[1,2]

Conferences per Teacher	Tests & Measures A	R	C**	Learning and Curriculum A	R	C	Growth and Development A	R	C	Personal Adjustment A	R	C
19	4	4	5	3	4	4	3	3	5	7	4	8
16	3	2	4	5	3	4	4	3	7	7	5	4
15	1	1	1	6	7	10	3	2	2	4	4	5
16	4	3	4	4	4	10	4	4	7	4	11	2
10	1	1	1	6	6	5	4	3	3	-	-	2
19	4	3	4	8	6	9	6	3	7	3	6	8
13	3	1	2	3	2	5	3	2	7	5	5	6
16	3	2	5	7	3	8	6	3	6	5	5	9
15/139 (Mean # 15.44)	4/27	2/19	7/33	5/47	2/37	6/61	5/38	4/27	7/51	4/39	6/46	10/54
SUB-TOTALS in %	34	24	42	32	26	42	33	22	45	28	33	39
OVER-ALL TOTAL (477 - 100%)	79 - 17%			145 - 30%			114 - 24%			139 - 29%		

**A - Advisory, R - Remedial, C - Coordination
-Inform -Solution -Harmonize Services
-Consult offered
-Recommend
-Suggest

[1]Model by V. Trione, University of Nevada, Las Vegas, Nevada
[2]L. Cronback "Educational Psychology"

B

Report to the Board
of Education
Riverside City Unified School District

Today I'm going to give you a brief overview of the Experienced Teacher Fellow Project for Preparing Content Reading Specialists at the Junior High School Level. Then I will show you a videotape of six Content Reading Specialists teaching their classes at University Heights and Chemawa Junior High School. Following the tape, I shall list some of the ways in which the Content Reading Specialists are working with other teachers to spread the effects of the program. After my presentation, if you wish to take more time, I am prepared to answer questions, including a question already given to me -- how to continue the program without additional district, state, or federal funds.

Description of the Project

The project began about three years ago. At that time we wrote a proposal to the U. S. Office of Education that was supported by both the San Bernardino and the Riverside City Unified School Districts. Hence, this project is a joint undertaking of UCR and these school districts.

The proposal was for a pilot project to recruit nation-wide 12 experienced teachers, have them attend the University full-time during the first year, and earn an M.A. degree in Education in cooperation with another department. After initial screening of 145 applicants, district personnel made the final selection. Among those selected were four teachers from Riverside, one each from Central, Gage, University Heights, and the Continuation High School. In the second year of the project, the Teaching Fellows or Content Reading Specialists were employed by the District and provided with a teaching load of four classes and two periods of release time to consult with other teachers. All of the fellows, except one, have now completed their M.A. degrees. Five of the group are in two junior high schools in San Bernardino and six are in Riverside, three at University Heights and three at Chemawa Junior High. They are in the audience along with our University Supervisor, Mrs. Elizabeth Arnold, who was formerly at Sierra Junior High.

To evaluate the project, we gave pretests on reading achievement last fall and will give post-tests this May. I'll be able to report the results of this testing to you this fall. At the present time, I would like to show you videotape excerpts from a variety of reading techniques used by the Riverside Content Reading Specialists teaching reading in their classrooms.

Videotape Presentation

The tapes show in order the following ways of including reading instruction in the regular classroom curriculum:

At University Heights

1. Christine Gutierrez teaches definitions of words by having students locate context clues in their textbooks.

2. Vaughn Hudson teaches reading through writing and reading of observation records.

3. Bonnie Bauman explains how to read orally with expression.

At Chemawa

1. Richard Zimmerman introduces a new unit on biography. The excerpt shows the variety of reading materials he uses in this unit to meet the wide range of individual differences in reading ability that exists in his class. Some of these materials were purchased with the $5000 budget our project allocated to University and Chemawa for purchase of materials and equipment not only for the fellows' classes, but also for all other teachers in the school.

2. Margaret Minor has group leaders go over reading guides and explain the answers to members of the group and show where these answers are located in the text.

3. Sylvia Cherry uses a discussion method called "group talk" to discuss dilemmas encountered in fables and thus extends their understanding beyond the story.

Our videotape cameraman, Mr. John Kelly, is from UCR's Audio-Visual Department. He will now show you the tapes.

Consulting With Other Teachers

In general, our program is trying to make a slogan that "every teacher is a teacher of reading" in his content area into a reality. To do so, we have tried various ways to consult with teachers in order to spread the effects of the program. Some teachers are already carrying out some of the practices in their classrooms and have reputations as good or excellent teachers. They are interested in extending their repertoire of techniques and we have gleaned whatever we could from them. Some teachers are searching for any help they can get. Our Content Reading Specialists have provided some help, for example, they have given the following service:

List of Services

Constructing and helping teacher use reading and reasoning guides for teaching students to comprehend their textbook material.

Helping a beginning teacher with a variety of instructional skills -- use of a unit framework, group work, role playing, writing by keeping a journal, use of multi-level texts.

Purchase of reading materials for individualizing instruction in math and science.

Selection and purchase of inquiry units in social studies.

Testing reading achievement and interpreting results to class -- this was done in all classes at Chemawa and University Heights taught by the Content Reading Specialists and in control group classes.

Developing vocabulary study in geometry class.

Teaching teacher aid how to use word attack sheets for teaching students how to read.

Put on demonstration workshop for entire faculty on how to teach for the wide range of reading abilities in the classroom. Included were a display of books, a film, and a demonstration lesson.

Informal discussions with various members of the faculty on teaching ideas.

Lending materials to other teachers.

Other teachers feel too overloaded to take on new techniques. Recently we thought of a way of solving this problem: one of the fellows will take the teachers class and teach the class a reading skill in the content area of the subject while the classroom teacher will have the period to observe and to

work with another teaching content specialist to prepare the next day's lesson using the same reading content skill. We are just beginning this procedure--we have high hopes that it will facilitate the use of our consulting time.

We realize that in our pilot project we have only begun to solve the problem of incorporating reading instruction into the junior high school curriculum. But, we believe that incorporating reading instruction into all content areas is a desirable approach because it reaches all of the students, all of whom can continue to improve their reading skills throughout the grades and in each content area.

In closing, let me say that we are highly appreciative of the cooperation we have received from the Board and the administration of the Riverside School District, particularly from Mr. Derry in initiating the program, Mr. Gabriel in serving as our liaison with the schools, Mrs. Mabel Purl for consulting on testing and research, and from the principals, Mr. Bob Flores at University and Mr. Tom Wallace at Chemawa, and from Mr. Walter Gardner and Mr. Horace Jackson, principals at these schools last year, who oriented their staffs to the program and participated in the selection procedures.

Suggestions for Continuing the Program

Without Funds

1. To continue with our fellows as teacher consultants, we may be able to provide them with student teachers and teacher assistants from UCR next year. Not only would they help in the training of these teachers, but they might also have some time for working with other faculty members.

2. A more long-range plan, which we are currently discussing at UCR, is to develop a differentiated staff of teacher aids, assistants, student teachers, experienced teachers, and a new category of Executive Teacher who would be a teacher, but be somewhat like but more than a team leader, perhaps be in charge of a grade level. The Executive Teacher would be responsible for the instructional program, for staff development, and for program development.

3. The School District, if it has any consultant or program development funds, may choose to use them in new ways. One of them may be to provide for teacher release time for program or classroom development. At Syracuse, Dr. Hal Herber and some of his doctoral candidates are involved in such a plan. An Instructional Skills Center was constructed in the school where five classes go for a three week period of individualized instruction in reading in the content area of social studies, while their social studies teachers are instructed at the school on teaching reading in the content areas and on preparing materials for their classes. After three weeks, the cycle is repeated with another content area. By the end of the year, the entire high school will have received training in reading in the content area and the curriculum will have been revised.

With Funds

Mr. Flores thinks a proposal could be submitted to the U. S. Office of Education for continuing the program. I have indicated to him that I would be willing to consult with him on the proposal.

Harry Singer
Associate Professor of
Education and Director
of the Reading Content
Specialist Program,
University of California,
Riverside

March 1, 1971

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DEPARTMENT OF EDUCATION

RIVERSIDE, CALIFORNIA 92502

March 11, 1971

Dr. Robert Ruddell
Department of Education
University of California, Berkeley
Berkeley, California

Dear Robert:

To remind you of plans on March 26 and 27 for your role as outside evaluator for the Content Reading Specialist Program of UCR in cooperation with Riverside and San Bernardino City Unified School Districts. On Friday, we'd like to have you visit the four junior high schools in which our program operates, meet with the Content Reading Specialists at their schools, talk to the principals of the four schools and whomever else time will permit such as teachers served by our Content Reading Specialists. You may also wish to view videotapes of Content Reading Specialists teaching in their classrooms. On Friday afternoon, we will complete the day with a beer and sherry party at the Faculty Club, 4 - 5:30 in your honor; all the Content Reading Specialists, our supervisor, Mrs. Francis Arnold, principals of the four junior high schools, some members of the faculty who participated in the program, and some public school faculty who have also cooperated in the program will be invited.

On Saturday morning, 9-12, you are scheduled for a presentation on "Decoding Programs for Dialectically Different Learners" in our U. C. Extension program, "Project Literacy: Reading Development at Junior and Senior High Schools." The purpose of "Project Literacy" is to prepare teachers in advance for the literacy requirement in the Educational Code that goes into effect in 1973. The project also serves to disseminate the results of our two year program.

The schedule for Saturday is as follows:

Saturday Morning:

9:00 - 9:45	Presentation
9:45 - 10:30	Discussion - Problems posed by audience (30-35 junior and senior high teachers)
10:30 - 11:00	Break
11:00 - 12:00	Continue Discussion with group

Dr. Ruddell March 11, 1971

Saturday afternoon:

12:00 - 1:30	Lunch with Content Reading Specialists
	followed by
1:30 - 3:00	Informal discussion
3:00 to plane time	Your own choice

I am in the process of making arrangements for two days of consulting time. Let me know your arrival time. Since the four junior high schools are some 30 miles apart, we'll want to start about 8:30 a.m. on Friday in order to cover all four schools. Since we need a written evaluation from you we'll arrange for ways to facilitate the report, such as note-taking and comments dictated into a tape recorder during the day.

Let me know your travel plans. I'll arrange accommodations - probably the Ramada Inn.

Cordially,

Harry

Harry Singer
Associate Professor

HS:jp
cc: Content Reading Specialists
Mrs. Francis Arnold, Supervisor
Principals of University Heights
Chemawa, Serrano, Shandin Hills
Mrs. Rachel Parry
Mr. Richard Gabriel

Reading Content Specialists Steering Committee
Meeting, October, 1970

The first meeting of this committee for Shandin Hills Junior High School convened in the school's conference room at 3:15 p.m. at the invitation of Mr. Thomas Feeney, Principal.

Those in attendance were: Mrs. Minor, PTA President; Jane Elmore, Joan Taber, Anthony Bechtold, Dale Johnson and Mr. Feeney. Mrs. Wynne was unable to attend. As Dr. Harry Singer, project director for the Experienced Teacher Fellowship Program, was unable to be there, Mr. Bechtold and Mr. Johnson explained the philosophy and aims of the project, stressing that is was a developmental rather than a remedial program. Under a grant from the United States Office of Education, it was designed as a pilot program to train experienced teachers to teach the wide range of abilities within a regular classroom as opposed to previous pull-out reading programs. Teaching Fellows who have now completed a year of graduate study at UCR have been assigned to teach representative classes in the four participating schools and will also be available during released time to serve as consultants to other teachers to maximize benefits of the program. In addition, the steering committee formed of parents, faculty and teaching fellows in their respective schools will serve in an advisory capacity during the year.

The first order of business was to decide upon an appropriate procedure for the expenditure of funds. Mr. Feeney then reviewed the minutes of University Heights Junior High Steering Committee as a basis for expending the funds made available under the program. It was decided that either Miss Elmore or Miss Taber would co-sign with Mr. Johnson or Mr. Bechtold for any request for materials.

1. An original fund of $2,500 per participating school was established this summer.

2. This amount has been reduced by initial expenditures by the teaching fellows to begin their classes in the approximate amounts of $400-$500 per school.

3. Any needed educational resource is permitted with the exception of expendable materials (paper, pencils, etc.) and travel.

4. Need is not restricted to the teaching fellows but rather to needs expressed by all teachers which will assist in the teaching of all ability levels within a classroom.

5. All requisitions must be initiated and signed by a teaching fellow and a designated committee representative.

6. Records and requisitions will be handled by Mrs. Rosie Russell in the Department of Education at UCR.

7. At the close of the program, materials are to remain the property of the University.

In informal discussion, committee members discussed with Mr. Bechtold and Mr. Johnson what materials faculty members had mentioned a need for so far.

1. On a motion by Mr. Johnson, the committee approved the purchase of 23 popular magazine subscriptions for the classrooms of the Teaching Fellows.

2. On a second motion by Mr. Johnson, the committee approved the purchase of additional paperback titles from Scholastic Book Services. These books written at grade levels 3-6 would help meet the needs of students whose reading achievement is at those levels.

Shortly thereafter, the committee adjourned.

Respectfully submitted,

/S/ Dale Johnson
/S/ Tony Bechtold

jp

EXPERIENCED TEACHER FELLOWSHIP PROGRAM - Conferences at Participating Schools
March 26, 1971
Dr. Robert Ruddell, Evaluator
Dr. Harry Singer, Project Director
Elizabeth Arnold, Supervisor

(1) Serrano Junior High School, 3131 Piedmont Drive, Highland, California

Mrs. Joyce Cozzo, Principal
Ron Peck, Faculty Member
David Kahl, Patsy Miller, Jean Fruehan, Teaching Fellows

Met with David Kahl, Mrs. Cozzo, and Ron Peck shortly after 8:30 a.m. in the Conference Room. The following notes, more or less verbatim, were in response to questions about the Program, its reception by staff members, and ways in which the Fellows found they could work with the staff.

Mrs. C.: We believe that having teachers work with other teachers has been the key to the program.

Ron: We had been considering the team approach and working with other teachers for several years but it was the old problem, taking that first step. It was a problem for me.

Mrs. C.: Of course, because of the type of school this is, we did have an advantage probably. One-third of the staff came from other schools--chose to come, that is. Second, with the open arrangement it's harder to hide, and this is another thing that's helped. I guess we are still hesitant to admit we can't do everything but I'm willing to bring it out because they'll try. In fact, to do all I can to move kids forward.

Even with the open classrooms, though, some teachers come into an open door building and try to firgue out how to close the door.

Dr. S.: How did you work this out, Ron? How were you able to use Dave?

Ron: Well, I had him working with individual students. We had some poor readers. Most of these that Dave worked with were minority students although you had some others -- Charley's students, for example. We are in a partially minority area and we are breaking down some barriers. Dave was trying to let the teachers know he was willing to help --operated this service for working with individuals who were poor readers, worked out some things to help these kids.

Dave: I figured it was a way to show teachers we had something they could use and then perhaps the next step would be into the classroom.

Dr. S: How many were involved? What did you do?

Dave: Five kids. I used some texts aimed at particular cultural (?) background and reading problems, worked up some of Herber's guides.

Dr. S: How would you feed that back to Ron?

Dave: On an informal basis.

Dr. S.: What texts did you use?

Dave: Seventh grade geography -- rewrote some parts to use. It was a matter of tying materials together. I think that's very important.

Mrs. C.: We've had the Fellows present the Program --given to one of our faculty meetings -- showing teachers how they could in turn develop some of these things. Hopefully all teachers are aware of what they are here for. Some teachers are just not quite ready for it.

Dave: That's why I wanted to take a low key approach. Dr. Singer's approach was that if you were doing something that helps so and so, it was a chance one could then get involved with others.

Dr. S.: Have you felt rejected?

Dave: If we had the chance to start again in September, we would get more people involved.

Dr. S: What impact remains?

Ron: I am sold on the program. I see a real need for it. Even our district in some of its attitudes concerning 'consultants' has changed. We are going to get away from 'consulting' from the central office.

Mrs. C.: We are going to have a full year program next year that will make it possible for more faculty members to work together. We will be on an experimental program. In addition to conference periods, the staff will all be free at the same time.

Dr. S.: What other things have you used with other teachers?

Dave: Paperbacks mainly. Games. Some things with groups. Helped typed reading guides.

Dr. S.: What would you say has been most important to you, Ron?

Ron: Kids have a hard time dealing with some of the things I have been trying to deal with --areas. Probably has shown me that I wasn't doing what I thought I was doing. This way I can get under the surface and find some of the needs.

March 26, 1971

Dr. S.: How do you arrange your groups?

Dave: Not on ability. Try to steer in some leadership when I break class down into groups. For example, we used reading guides and small groups with Teenager and the Law.

Dr. S.: How did that work out?

Ron: I thought it worked real good.

Dr. S.: If you were to describe the students in the school, how would you characterize them?

Mrs. C.: We have 799 students. 32-33 are Chicano, 75-80 are Black, 28 students on special programs, ESEA, reading and math.

Dr. S.: What would you say had been your greatest problems?

Dave (or Patsy Miller - who arrived when her class ended): Motivation and interest. Most of the kids are pretty much middle class kids -- a lot of them turned off.

* * * * *

(Note - Jean Fruehan was ill, not at school.)

(2) Shandin Hills Junior High School, 4301 Little Mountain Drive, San Bernardino

Mr. William Talcott, new principal
Tony Bechtold, Dale Johnson - Teaching Fellows

Arrived at Shandin Hills around 10:00 a.m., met briefly with the two Fellows and then visited both classes.

Discussed problems related to administrative changes. New school opened in September (open classrooms, carpeted, etc.). Principal became ill and after several months with vice principal serving in principal's absence, another principal transferred in. Student population is drawn from areas of extremes - many poor white and poor black plus a group of middle and upper middle white students. Discussed problems inherent in this type of composition. Both Fellows stressed the counseling angle of teaching, the need for expertise in human relations.

Both Fellows mentioned the experience of other staff members. Experienced, many from elementary schools who "knew their business very well." Also stressed the many program changes, the wholesale shifting of students from class to class when classes were changed from heterogeneous to homogeneous groupings. In their opinion, the greatest problems their fellow staff members have are the same problems teachers everywhere have -- they need materials and time.

During the brief look-in on class sessions, Tony was working through two phases of a reading guide based on "The Winner," - a play about Jimmy, a boy of the ghetto from Scope Magazine. Dale was using the same play and was in the second day, discussing ideas and concepts after students had completed the reading guides. Students were already going beyond the play into their own lives and Dale was helping them work through value clarifications.

Both Fellows worked with staff members. Dale Johnson encouraged faculty to stop by his class to see it in operation. (Louis Doody, to whom we spoke in the corridor, had just completed such a visit. He said he found it most helpful and that he had been able to adapt many of the ideas to his own field.) Tony Bechtold utilized his conference periods to exchange ideas and to work with staff members in the faculty workroom. Both utilized low key approaches.

(3) University Heights Junior High School, 2060 University, Riverside

Mr. Robert Flores, Principal
Miss Bonnie Bauman, Mrs. Christine Gutierrez, Miss Vaughan Hudson, Teaching Fellows

Met at Denny's for lunch where the Fellows joined us briefly.

In discussing possible changes in another two-year program, Bonnie Bauman mentioned the following:

exposure to all the available content materials
earlier identification of role of content reading specialist
clarification of expectations of all concerned

Faculty of this school was described as being split - half very traditional, half young and accepting of new ideas. School itself is being replaced by new building in near future. Draws from East Side black and chicano neighborhoods as well as University and professional residential areas. School is limited to seventh and eighth grades.

Vaughan Hudson was most enthusiastic about a new series of Challenger books which had had a spirited reception from her average classes. She discussed ways in which this particular set could be evaluated. (This is a series of low reading level, high interest booklets based on experiences of young people of all types of backgrounds.

(4) Chemawa Junior High School, 8830 Magnolia, Riverside

Mr. Tom Wallace, Principal
Mrs. Sylvia Cherry, Mrs. Margaret Minor, Mr. Dick Zimmermann, Teaching Fellows

Teaching Fellows met with much resistance in getting Program started at this school with Vice Principal determined to substitute a pullout program of her own which would have included 50 students identified as least likely to succeed emotionally or academically. To meet the intent of the Program it was necessary to work through the downtown office to reinstate representative classes. Program was thus delayed into October. Despite cleavage in faculty --half old guard, half new and gaps in communication --Fellows were able to work with at least three teachers each.

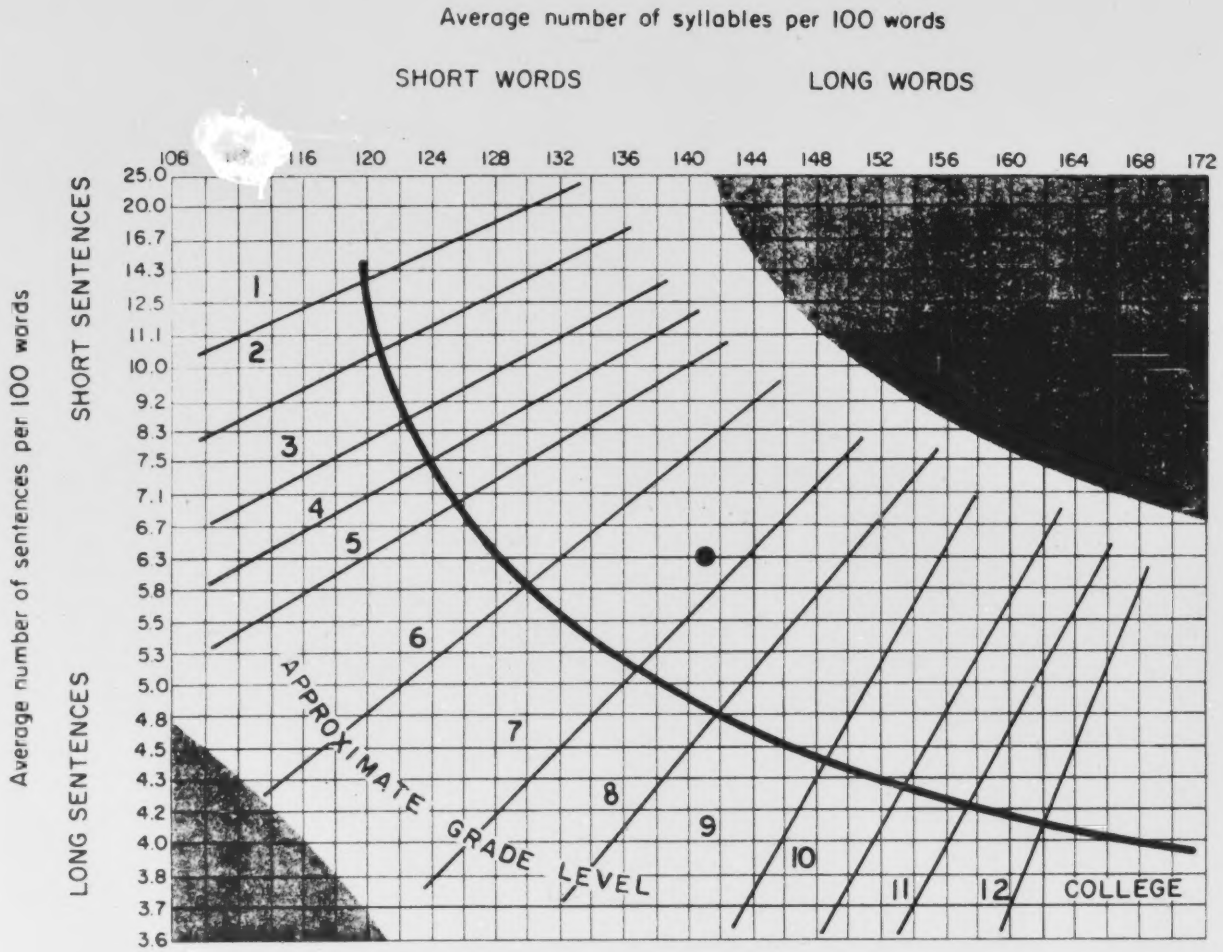
Brief visit with Mrs. Cherry in her classroom. Students were working on word attack skills in conjunction with poems they had been reading. One student who read "abroad" as "a board" was asked if he knew what "abroad" meant. Most of the boys laughed.

Conference with Mrs. Minor out on the Quad under the trees revealed some success with a set of inquiry pictures she was lending to another history teacher. She also mentioned working up some data sheets for Mrs. Campbell. (Dick Zimmermann, after the final bell, joined us briefly before leaving for home with the onset of the flu. His success has been with members of the English Department mainly. He has secured paperbacks and other materials for their use. He works with the Reading Teacher in constructing guides and other materials.)

Sylvia Cherry, although she was detained and did not mention it, constructed reading guides for geometry that were so appreciated by the teacher who used them that they were the subject of a commendation to the downtown office for Sylvia'a help.

GRAPH FOR ESTIMATING READABILITY

by Edward Fry, Rutgers University Reading Center, New Jersey



DIRECTIONS: Randomly select 3 one hundred word passages from a book or an article. Plot average number of syllables and average number of sentences per 100 words on graph to determine the grade level of the material. Choose more passages per book if great variability is observed and conclude that the book has uneven readability. Few books will fall in gray area but when they do grade level scores are invalid.

EXAMPLE:

	SYLLABLES	SENTENCES
1st Hundred Words	124	6.6
2nd Hundred Words	141	5.5
3rd Hundred Words	158	6.8
AVERAGE	141	6.3

READABILITY 7th GRADE (see dot plotted on graph)

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For further information and validity data see the April, 1968 Journal of Reading and the March, 1969 Reading Teacher

E

TESTS

The tests used in this study consisted of the following:

California Reading Test Form W, Junior High Level, Grades 7, 8, 9. Devised by Ernest W. Tiegs and Willis W. Clark. California Test Bureau/McGraw-Hill. 1957 Edition, 1963 Printing.

California Study Methods Survey. Grades 7 to 13. Devised by Harold D. Carter California Test Bureau/McGraw-Hill, 1958.

The Athey-Holmes-Singer Reading Personality Scale. University of California, Riverside (Multilith), 1970. This scale, labeled as an "Interest Inventory" for this study is reproduced on the following pages. Research leading to the construction of the scale can be found in:

Athey, Irene and Jack A. Holmes. "Reading Success and Personality Characteristics in Junior High School Students". University of California Publications in Education, Volume 18, University of California Press, Berkeley, 1969.

Attitudes Toward Teaching Reading in the Content Areas, by Wayne Otto. This scale can be located in the following publication:

Otto, Wayne. Junior and Senior High School Teachers' Attitudes Toward Teaching Reading in the Content Areas. In George B. Schick and Merrill M. May (Editors), the Psychology of Reading Behavior, National Reading Conference Yearbook, 18, 1969, 49-54.

Athey-Holmes-Singer Reading Personality Scale

Interest Inventory

INTRODUCTION: This is an interest inventory. There are no right or wrong answers.

It is an inventory about you, your interests, your feelings, and the things you value most or least. The first section of the inventory concerns ways of earning a living, or what you might like to be.

From each of the following lists of five occupations, choose the one you would like most to be and make a heavy mark on your answer sheet under the number of your choice. If there are some lists that do not include your preference, make a choice anyway. One from <u>each</u> list must be marked.

1. a. Fireman
   b. Housewife
   c. Model
   d. Policewoman
   e. Lawyer

2. a. Lawyer
   b. Movie Star
   c. Politician
   d. Scientist
   e. Storekeeper

3. Choose from the following the ones you would most like to go with to a movie. Make one choice.
   a. Family
   b. Friends of your same sex
   c. Friends of the opposite sex
   d. Friends younger than you are

If you really dislike the thing, the person, or the task discussed below, make a heavy mark under True (No. 1 or "T" on the answer sheet). If you are indifferent or do not dislike it, make a heavy mark under False (No. 2 or "F" on the answer sheet).

4. Having to recite in class

5. Teachers who are not interested in their pupils

6. Being punished for things someone else did

7. Classmates who are snobbish or stuck-up

8. Being laughed at by the other students

9. Routine school work

10. Teachers who criticize one's faults or mistakes

11. Having someone else get a better mark

12. Teachers who use sarcasm or ridicule

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13. If you were 18 years old and could choose, which of the following would you do?
    a. Quit school and stay home
    b. Get a job and live at home
    c. Get a job and leave home
    d. Go to school or college
    e. Get a job but go to night school

14. Which of the following do you like to do best after school? Choose one.
    a. Play games (sports)
    b. Read
    c. Go shopping
    d. Talk with my friends
    e. Just bum around by myself

15. How do you feel about bossy people? Choose one.
    a. I can't stand them.
    b. They make me nervous.
    c. I don't pay any attention to them.
    d. I treat them the way they treat me.
    e. I cut them down to size.

16. How do you feel when you speak to someone you think you know and find this person is a stranger?
    a. I feel terribly silly for a minute or two.
    b. I keep thinking about it for a long time and wonder what the person thinks of me.
    c. I just apologize and think no more about it.
    d. I think it's a good joke on me.
    e. I think of something smart to say so they will feel like the joke is on them.

Mark True or False on the answer sheet to the questions below. (Mark No. 1 if "T" or No. 2 if "F".)

17. Do you feel like getting up in the morning? (That is, are you ready and therefore enjoy getting up in the morning?)

18. Do you have things on your mind so you can't sleep well at night?

19. Do you get out of breath quickly when running?

20. Do you have pains in your eyes?

21. Do you often feel grouchy?

22. Do you often wish you had never been born?

23. Do you wish your parents would spend more time with you?

The next group of questions is given in pairs and will require you to think a little more carefully. Both questions of each pair must be answered, and you may not feel they should be answered in the same way. If you feel that you are exactly like the person described below, indicate YES by marking No. 1 on the answer sheet. If you are completely opposite to the person described, indicate NO by marking No. 5. If you are somewhere in between, place the mark where it will be most true. The person indicated by the letter of the alphabet is always of your same sex. Let us study the sample below.

SAMPLE: Student X studies harder than anycne else in your class.
Am I like X?
Do I wish to be like X?

If you really feel that you study harder than anyone, mark No. 1 for YES. If you hardly study at all, mark No. 5 for NO. If you feel you study an average amount or about halfway between the one who studies the most and the one who studies the least, mark No. 3. If you feel you study almost as hard as No. 1, mark No. 2. If you study a little more than number 5, mark No. 4.

You may wish you were different from the way you rated yourself. If you do, mark the choice where you wish you were.

Remember the choices are 1 = YES, 2 = ALMOST YES, 3 = AVERAGE, 4 = ALMOST NO, 5 = NO.

S would rather read than do anything else.

24. Am I like S?

25. Am I like G.

26. Am I like T?

27. Do I wish to be like T?

28. Do I wish to be like D?

29. Am I like L?

30. Do I wish to be like L?

F feels old enough to make decisions without grown-up help.

31. Am I like F?

32. Do I wish to be like F?

33. Am I like M?

34. Do I wish to be like M?

35. Am I like J?

36. Am I like Y?

37. Am I like R?

38. Do I wish to be like B?

39. Am I like N?

40. Do I wish to be like Q?

41. Am I like O?

P usually trusts people.

42. Am I like P?

43. Do I wish to be like P?

44. Do I wish to be like W?

45. Do I wish to be like C?

46. Am I like I?

47. Am I like P?

48. Am I like Y?

49. Am I like A?

50. Do I wish to be like A?

51. Do I wish to be like F?

N is good-natured and is sometimes taken advantage of by other people.

52. Do I wish to be like N?

53. Am I like H?

54. Do I wish to be like H?

55. Am I like R?

56. Do I wish to be like R?

V is allowed to go out with a crowd, without any grown-ups along.

57. Am I like V?

58. Do I wish to be like Z?

59. Do I wish to be like I?

60. Do I wish to be like L?

The next three questions concern things that we may be afraid of. Many of us feel we have good reason to be afaid of many things, while some of us just don't feel that way. Mark No. 1 on the answer sheet if you feel you are like the person described. Mark No. 2 or "F" if you feel you are <u>not</u> like the person described.

61. B. is afraid of earthquakes. Am I like B?

62. C. is afraid of earthquakes. Am I like B?

63. D. is afraid of death. Am I like D?

Project Literacy Projects for
Teaching Reading in the Content Areas at the
Junior and Senior High School Levels

Karen Ostermiller - Ramona High School

"Developing Reading Skills for Junior and Senior High School Students"

Elective course of individualized reading. Administered WRAT Test. Worked with those reading Gr. 7.0↓ Program: Dolch words, tachistoscope, build simple sentences from word flashed. Used Lyon and Carnahan: Phonics We Use. Configuration and reversals--spell words. Structural Analysis and Context Clues; Word Attack-A Better Way to Spelling by Clyde Roberts, Chicago (Harcourt, Brace), SRA kits. Newspaper and magazines. Library of books.

Glen C. Newman

"Improvement of Instruction with Emphasis on Reading for Hemet High School English Department"

Used Nelson-Denny Reading for grouping freshmen into X,Y,Z. Dept. offers: remedial reading, instruction to foreign born students, elective in practical reading, and developmental reading for freshmen + English I and II. Nevertheless, we do not reach enough students to cause any great changes in reading. Uses magazines: Life, Look, Surfer, Outdoor Life, Hot Rod, Seventeen, Literary Calvacade, Scope, and Readers Digest plus individual titles on revolving book rack. Also, permitted 4 classes of students to choose titles at local bookstore on individual purchase basis: chose titles they and others like them would enjoy. Plan to move reading instruction into all English classes--includes a unit on reading. Better students stress speed and comprehension. Need units of work on making inferences, vocabulary study, and study skills.

Teaching reading in content areas: pre-teaching of materials; introduce difficult words, specific items, objectives of lesson told to students, discussion summarized at end, do students take notes effectively-would like to have teachers use video tape recorders.

Dorothy E. Corley - J. W. North High School

Richard Corly - by E. A. Robinson to begin unit on poetry with average sophomores. Use Paul Simon's rock tune "Richard Cory" for comparison-contrast of poem and song lyric (poem of envied rich gentleman who put a bullet in his head)

Lecture on economy of genres. Poetry has most constraints and is most economical. Novelist is not limited in any way. Short story writer can use omniscient viewpoint to take reader into mind of characters. Dramatist reveals character through dialogue and also has time limitations.

Use of meter: iambic (ă lŏne)
trochaic (hăppy)
dactyllic (hăppĭness)
anapestic (ĭntĕrfĕre)
Metrical feet: tetrameter
pentameter
Rhythm sets mood: dactyllic - waltz
trochaic - Indian drums
Rhyme schemes: couplet: aa, bb, cc
alternating rhyme: abab, cdcd

Differences between speech and essay--speech for listening must be simple, shorter sentences, direct, obvious, & clear; essay can be abstract.

Simon's song: I Am A Rock, I Am An Island
John Donne's: No Man Is An Island
Dickenson, Frost, Cummings

Emanuel V. Goss - Dr. Mark Shedd, Superintendent of Schools
Reading Improvement in Seventh Grade
Gave oral reading test - then grouped - used SRA Reading Lab IIIA - Pre and post test gain range: 0 to 3 grades.

Elaine Ehresman
"Characterization in the Short Story"
To ninth and tenth grade students.
Learn about a character in four ways: what author tells about him, what character tells about himself, what other characters say about him, what he says or how he acts in an important situation

"All the Years of Her Life" by Morley Callaghan
Contrast "stock" character with well developed character e.g. cruel stepmother. Use reading guides along with short story.

Lenore L. Olson
Methods of characterization in "Shane" by Jack Schaefer.
Reading guides for teaching the short story.
On a contract level

Ellen Sparrowgrove - Wells Intermediate
An Individualized Reading Project. Sustained Silent Reading McCracken Plan. Reading Wheel: Romance, Mystery, Science, Fiction, Humor, Adventure, Animal, Biography, Reference, Other, Sports, Teen-age.

Student Card: Main character, story summary, appropriateness of book's ending, most unforgettable moment in one story, recommendation of book.

Margaret Minor

Skills develop through social studies content. Set of reading guides for text on Eurasia. Skills used (e.g. main idea), materials and methods used mostly directed, non-evaluative, non-integrative, non-inferential, e.g. students not asked what effects topography or climate had on political affairs, economic affairs, international relations, history, etc.

Thad B. Turley

Use of Reading guides in remedial classes of 6th graders to develop word attack, vocabulary, imagery, comprehension

Guides

(1) Words to know
(2) Questions on first paragraph
(3) Questions on rest of story

Integrated reading guides with squeezing a paragraph by using questions on first paragraph, then on rest of story. Also introduced new words.

Ruth E. Hatch

Experiments with a Seventh Grade Reading Class

1) Scott Foresman Reading Inventory Test. Help with direct and implied detail and much help with reasoning and generalization synonyms, antonyms, word recognition, analogy, vocabulary through context and dictionary.
2) Assign over two week period to help students Pretest: "Grandfathers Front" and then recall type of reading guide. Cloze test of 100 word passage from "Coasting Off the World". Results all on instructional level in reading. Questionnaire by Alan Purves.
   (1) Preconception Questionnaire to assess opinions about books, poems, stories, etc.
   (2) Critical Approach Questionnaire

Herber's Reading Guides

Moffett Approach: Literature from author's viewpoint. Read <u>Dear Theo</u> - Van Gogh compared with brother. Write character sketch on Van Gogh.

Composite impressions of pebbles held in one's hand after reading "Pebbles" by Zbigniew Herbert.

Margaret Norton - Central

Folklore Unit at 7th Grade.

Oral work and reading with tapes to reinforce reading. Students check out stories in Song and Verse, and check out tape and tape recorder. Write in same mode of discourse,

discussing first with teacher. Students report on background. Students read each other's papers. Assignment (1) Read six fables, write a moral for each one (2) Take a proverb and write a fable for it (3) Try to imitate a folktale's device

Mark Grasse - Corona, California
School Math II
(1) Readability of text.
(2) Readability of class.
(3) Constructs structured overview
(4) Methods
OARWET
SQ4R
(5) Write sentence with question after it
(6) Comprehension - a new strategy

Frank Guzman - Sierra Jr. High 8th grade
Individual Differences
1. Traditional classics for the challenging student
2. Paperbacks from Hooked on Books
3. Quizzes on advertising, recipes, fishing equipment, directions, toy assembly directions, telephone directory.

Lorna Griffith
Individual Reading Program
Class profile: age, sex, SES, racial 8 M-A, 1 Korean-A, 19A. 3 students on probation with juvenile authority. WRAT 1.9-11.8 19 below grade level 8.5
Used Fader's Hooked on Books to get 120 books from district librarian. Paperback book rack for books purchased from TAB and AEP Book Clubs. Loan books. Library. Over half had never read a book just for pleasure. Only 6 families had daily newspaper, only 2 had magazine subscription. No book reports, spelling, English assignment. Read aloud Tuned Out, Hinton's The Outsiders, School Librarian gave book talks. All read USSR. Teacher read Love Story.
Reading Wheel.
Kept journal (10 sheets 8 x 10 lined paper in colored construction binder) on thoughts of what they read.
Riverside Press Enterprise Newspaper
Individual work contracts on weekly basis
Success measured by non-readers and reluctant readers who have now read books, minimal talking during program, library use improved.

Philomena C. Hornsby
Poetry Unit
Jesus Christ, Superstar - on record
Discussion questions - study guides

Joann Weller - Claremont
Syllabication and Poetry
Four forms: Haiku, cinquain, diamante, limerick

Directions for cinquain in Scope Sept 14, 1970
Diamante: seven lines, one word, increase to four per line, decrease to one word
Students wrote and discussed own poems, stimulated by objects, experiences.
Moffett type approach

Alice Eastburn - Alvord
Read paragraph, made comments on purpose of author and paragraph.

Karen Knox - La Sierra
Small groups of six
Used questionnaire to define problem reader
Read Outsiders by S. E. Hinton
Informal word recognition inventory
Tutor approach
Case study reports
Korean immigrant
Mike - reads at 3rd gr. level - used word recognition techniques
Missed variety of words
Teacher and student took turns reading paragraph aloud

Harriet Rayburn
Reading and writing in the same mode of discourse. High school freshmen.
Modes of discourse
Play, description of people or pets, diaries, letters to friends, letters of application
Experiment and use mode of discourse to open and close experiment
Treatment: Improve punctuation, spelling, order and sentence structure
No check for transfer to reading

Patricia George - Claremont Remedial Reading - Montclair High School
Writing in mode of discourse.
Unit on crime - started off by reading short story on "Hit and Run". (man hit boy on bike)
Discussed effect of mode of discourse on story.
Read four newspaper crime reports, evaluated them according to own values and feelings, discussed opinions in small groups.
Reworded outline of story plan paralleling original story--students to write.
Structured assignment better than open-ended one.
Reading and reasoning guides.

Elizabeth Gowing
Journalism, elective, with prerequisite of B or better- English
Changed from concentrating on teaching jargon first to including

it on an organic basis in process of newspaper work. Also exercises on four styles of journalism--feature, editorial, sports, newstory--changed to teaching as newspaper written. Moffett's reading, writing, reading mode again.

Content, tenses, style, structure, use exercise sheet instead of lecture who, what, where, when, why, how.

Mary S. Polite
A Unit on Argument

Robert Harrison - San Jacinto
Stocked library with different books. Lives of Famous People
Self selection
How-To Books
References
Jr. High School Library Catalog
Books for Reluctant Readers- kept list of books read
Now has comprehensive list of titles for 9th grade

Richard C. Paul - the PAR Reading Program, Programs for Achievement in Reading Content., Providence, Rhode Island
Uses CM and DM four, & Iowa Silent Reading Test.
Places in grade levels. Fur books, 3 mechanical devices. Book I: 120 stories at 12 different levels of reader difficulty, 10 comp. questions on each story. Timed reading. Book II - Speed. Book III - Word study. Book IV - Graphs.

Self evaluation questions
Level Finder: story, questions
Tachistoscope and 20 filmstrips

Roberta Grey - Hemet, Sophomore English
Persuasive Writing and propaganda
Lower track: Grade 4-7th level
Unit on propaganda

Kathy Demaine
NDEA Project - Remedial Reading
Materials
Voice Magazine, Scholastic Magazine
Education Development Labs
Reading for Understanding SRA
Iowa Silent Reading Test

Judy Goldbaum and Cathy Yuhkovich - Moreno Valley High School
Career Skills
Replaced outline of course on vocational guidance, particularly in vocabulary of world of business, and in individual reading and writing problems. Defined 8 occupational fields Organized committees for presenting material to class on skits, field trips, job interview, etc. Lists references on job preparation and obtaining a job. List of jobs. List of workbooks.

APPENDIX G

ANNOTATED LIST OF TEXTS IN SECONDARY SCHOOL READING INSTRUCTION

Charles R. Cooper[1]
School of Education
University of California, Riverside

1. Artley, A. Sterl. Trends and Practices in Secondary Reading: A Review of the Literature. Newark, Delaware: International Reading Association, 1968.

   This review covers more than 180 recent studies and reports in secondary reading. The bibliography is very useful. Specific areas covered in depth are factors related to continued growth in reading, programs of reading instruction, instructional procedures, reading interests and habits, and personnel for reading programs. A closing summary lists twelve specific conclusions drawn from the studies under review.

2. Barbe, Walter B. Teaching Reading: Selected Materials. New York: Oxford University Press, 1965.

   This anthology of readings is a useful introduction to the whole field of reading. All the sections except one, "Initial Stages of Learning to Read," are relevant to the concerns of teachers of remedial and developmental reading in the high school. Of particular relevance are the final two sections, "Junior and Senior High School Reading" and "Issues in Reading Instruction."

3. Bond, Guy L. and Milo A. Tinker. Reading Difficulties: Their Diagnosis and Correction (second edition). New York: Appleton-Century-Crofts, 1967.

   A well-known text on diagnosing and correcting reading difficulties, this book is written for the classroom teacher, as well as the special remedial teacher and clinician. The bibliography, running to over 300 items, is useful. The appendices contain lists of tests, other texts, sources of graded book lists, and sources of materials.

4. Carillo, Lawrence. Reading Institute Extension Service: One-year Schoolwide Project, Grades 7-12. Chicago: Science Research Associates, 1966.

   This series of eight publications is a very valuable resource for the teaching of reading. The first is a fifty-seven page annotated bibliography of professional books and journals, texts, workbooks, readers, games, materials, mechanical devices and films and other audio-visual materials. The others cover the following topics: schoolwide appraisal of pupils' reading, grouping and providing for individual differences, planning a schoolwide reading program, helping the retarded reader, the gifted reader, reading interests and motivating reading, getting ready for next year. The publications grew out of SRA's series of reading institutes, which have been conducted across the country since 1957.

[1]This annotated list was distributed to students in the Project Literacy course, which was taught through University Extension as a means of disseminating the results of the Content Reading Specialist program.

5. Chall, Jeanne. Learning to Read: The Great Debate. New York: McGraw-Hill Book Company, 1967.

The most widely-read book on the teaching of reading since Flesch's Why Johnny Can't Read, The Great Debate is "an inquiry into the science, art, and ideology of old and new methods of teaching children to read" during the years 1910-1965. For the secondary teacher who knows nothing about the materials and methods of beginning reading instruction in America's schools, this book is an excellent primer. The bibliography of texts, articles, and reading programs is quite useful. Uniquely valuable is an appendix, "Classification of Twenty-two Beginning Reading Programs," in which the variables used to classify reading programs are fully explained, thereby providing a brief introduction to what is significant in a beginning reading program. Teachers of reading at all levels should know this book.

6. Deighton, Lee C. Vocabulary Development in the Classroom. New York: Columbia University, 1959.

Professor Deighton is a well-known authority in the specific area of vocabulary development. He states that the main goal of vocabulary development is to enable the pupil to understand unfamiliar words when he meets them. Secondary goals are the acquisition of new words and the expansion of meaning in old words. The introduction states the purpose of the book as follows: "It is hoped that this study will show why the reader never gets all the meaning of a word at any one encounter; how meaning comes from experience, not from a dictionary; that as experience broadens, meaning becomes richer; that he is never to seek the meaning of a word; that for an unfamiliar word met in reading, the methods here suggested will provide clues to its meaning; that these clues cast up enough meaning to permit him to read the passage with understanding." This may be the best book currently available in this area.

7. Early, Margaret J. (editor). Reading Instruction in Secondary Schools. Newark, Delaware: International Reading Association, 19[illegible].

This collection of readings by leaders in the field touches on reading programs, teaching procedures, evaluation, significant research on secondary reading, and reading in the content areas of science, math, history, and literature. Each article is thoughtful and substantial and is followed by "discussion" from experts present at the conference where the articles were presented.

8. Kash, Maurice, Reading and Thinking. New York: Doubleday and Company, 1967.

Unusual for the high intellectual level of its discussion and for its readable style, this book focuses on the use of written materials to develop cognitive abilities. Kash has contributed the first and last two essays. The middle four, by other authors,

discuss the use of materials in social studies, language arts, mathematics, and science. Eash's first essay discusses reading and cognitive abilities, which he lists as understanding, utilizing, discriminating, chaining, and judging. In the last two essays he defends the use of written materials in the classroom, but argues for their use to provide a structure of knowledge, rather than an accumulation of knowledge. Every teacher should know this book. The materials used as examples in the essays are appropriate for Grades 1-8.

9. Elkins, Deborah. Reading Improvement in the Junior High School. New York: Columbia University, 1963.

A report on a project in a New York City junior high school, this study outlines the planning and preparation, classroom procedures, and evaluation necessary for a junior high developmental reading program.

10. Fader, Daniel N. and Elton B. McNeil. Hooked on Books: Program and Proof. New York: Berkeley Medallion Books.

Since its publication in 1966 and its re-publication in 1968 with a report of research, this book has created widespread interest among secondary English teachers. It is a total English program (reading, language and writing), but it has important implications for the specific problem of teaching remedial and developmental reading. Interestingly, Fader advocates a school-wide approach to reading and writing, the same approach advocated by most writers (like Karlin) on secondary developmental reading. Very valuable are the list of 1,000 paperback titles which students enjoy and sample study guides on Anne Frank and West Side Story. "English in Every Classroom" is based on the dual concepts of saturation (surrounding the student with newspapers, magazines, and paperbacks) and diffusion (making every teacher responsible for the program). Fader believes that the English class itself should be conducted so that (1) the approach to literature is social rather than literary, (2) the English teacher is encouraged to select and create his own reading materials within the limits of type and format prescribed by this program, and (3) the teaching of language skills is accomplished through organic rather than mechanic or descriptive means.

11. Gunn, M. Agnella (editor). What We Know About High School Reading. Champaign, Illinois: National Council of Teachers of English, 1969.

A collection of articles, all originally published in Volume 58 of the English Journal, reviewing research in teaching reading at the high school level. Articles cover reading in the content fields, practices and materials for teaching reading, reading programs, attitudes, the role of the English teacher, and evaluation and measurement in reading.

12. Haimer, Lawrence E. (editor). Improving Reading in Secondary Schools: Selected Readings. New York: The MacMillan Company, 1967.

This may be the best book of readings available for the secondary teacher. The readings are well-organized and thoughtfully introduced, and all the currently important names in secondary reading are represented. There is a section of fifteen articles on reading in the content areas. The other sections cover the whole range of practical and theoretical problems in secondary reading.

13. Harris, Albert J. How to Increase Reading Ability. (fourth edition). New York: David McKay, Inc., 1961.

Written primarily for the elementary teacher, at least half of the book contains sections useful to the secondary teacher. There are sections on exploring causes of reading difficulties, developing word recognition skills, developing understanding in reading, fostering reading interests and tastes and improving rate of reading. Appendix A contains a list of tests (prices, publisher's address, description), and Appendix B contains a graded list of books for remedial reading.

14. Herber, Harold L. (editor). Developing Study Skills in Secondary Schools. Newark, Delaware: International Reading Association, 1965.

This book contains a group of practical and useful essays on various aspects of developing study skills: vocabulary development, word study skills, using book parts, using sources of information, understanding organizational patterns in spoken and written materials, and utilizing visual aids. All the authors assume that teaching study skills should involve the student as an active participant. They also assume that there are many skills which should be specifically taught to students. Finally, they all consider training in study skills to be the responsibility of every teacher.

15. Herber, Harold L. Teaching Reading in Content Areas. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970.

This text contains very explicit techniques and approaches for teaching reading in the content areas of the secondary grades. Its special feature is the presentation of "reading and reasoning guides," to aid students alone and in groups to gain more from their reading in secondary school subjects. Herber is presently the leading authority on teaching reading in the content areas.

16. Journal of Reading. Published eight times a year by the International Reading Association, Six Tyre Avenue, Newark, Delaware, 19711.

This journal is the oldest and best known in the field of secondary reading. It contains useful reviews of new books and materials.

Articles include research reports, descriptions of specific techniques for teaching, and descriptions of school reading programs.

17. Karlin, Robert. Teaching Reading in High School. New York: The Bobbs-Merrill Company, Inc., 1964.

Karlin's book first explores theoretical concepts in learning and reading and then translates these into specific teaching procedures. Karlin thinks that developmental reading skills should be carefully taught in every high school. Basic to any good secondary reading program are (1) reading activities available to the normally developed reader as well as to the gifted and the handicapped reader and (2) every teacher accepting his responsibility for teaching reading, whatever his subject matter might be. His book discusses the full range of theoretical and the practical problems and issues in this field.

18. Marksheffel, Ned D. Better Reading in the Secondary School. New York: The Ronald Press Company, 1966.

Since it contains some background information on the psychology of reading, on readiness, and on motivating students to read, Marksheffel's book is a good introductory text to the whole subject of reading. In a chapter discussing developmental reading programs the author says they should be based on the following principles: inclusion of subject-matter teachers, objectives based on students' instructional reading level, and flexibility.

19. Massey, Will J. and Virginia D. Moore. Helping High School Students to Read Better. New York: Holt, Rinehart and Winston, Inc., 1965.

This short book (102 pages) is designed to give teachers an over-all view of the total reading process and to serve as a concise handbook of ready reference. The authors think the teacher should be concerned not only with word-perception and comprehension skills, but also with what reading is doing for the student. They insist that developmental reading is the responsibility of all teachers. The appendices contain three inventories that a teacher might use to assess reading problems and student interests.

20. McCullough, Constance M., Ruth Strang, and Arthur E. Traxler. The Improvement of Reading (fourth edition). New York: McGraw-Hill, 1967.

This general introduction to the subject of reading in the schools was written by three of the leaders in the field. They are interested in remedial and developmental reading at all levels, as well as beginning reading instruction. Of particular value to secondary teachers is a section on reading in the content fields. The discussion and lengthy bibliographies cover the following subjects: English, mathematics, science, social science, business education, home economics, industrial arts, music, and

foreign language. Another section discusses reading problems of special groups of readers: able retarded, slow, disabled, severely disabled, and able. The book concludes with several lists of books and materials for teaching reading.

21. Otto, Wayne and David Ford. Teaching Adults to Read. New York: Houghton Mifflin Company, 1967.

Intended as a basic reference to methods and materials for teaching functionally illiterate adults, this book contains a description of adult illiterates and a discussion of the basic principles of instruction in reading. Most of the book is devoted to the materials. Basic reading programs for adults, many of them the programs used for beginning reading instruction in the elementary grades, are described and evaluated. Suitable supplementary skill builders and readers are listed and annotated. Also included is a list of materials (not annotated) for teaching reading to foreign-born adults. A final chapter explains how to implement an instructional program in reading for adults.

22. Pollack, Myron and Josephine A. Piekarz. Reading Problems and Problem Readers. New York: David McKay Company, Inc., 1963.

The bulk of this book is several case studies illustrating a wide range of reading problems. The first part of the book discusses the nature of reading, the causes of reading problems, and the kinds of reading problems. A lengthy appendix explains in detail how to establish a reading laboratory in a junior high or high school -- tests, materials, machines, floor plan, time schedules, and grouping of students. This writer argues for intensive work in a separate remedial lab, rather than schoolwide emphasis on improving reading techniques in the content areas.

23. Reading Improvement. Published three times a year by Academia Press, P. O. Box 125, Oshkosh, Wisconsin, 54901.

Like the Journal of Reading, this newer journal contains reviews of new books and materials, research reports, and general articles on teaching techniques and school reading programs.

24. Robinson, H. Alan and Ellen Lamar Thomas (editors). Fusing Reading Skill and Content. Newark, Delaware: International Reading Association, 1969.

The introduction states: "The purpose of this volume is persuasive; the authors hope to encourage all high school classroom teachers and reading specialists to consider or reconsider their reading programs and place the focus on the fusion of reading skills with the content of each discipline." Part I contains articles by administrators and teachers at the University of Chicago Laboratory High School, where a school-wide reading program has been in effect for some time. Part II contains

longer articles by experts in developmental reading. Some address themselves to the general problem of reading in the secondary school; others focus on specific content areas. An exceptionally useful collection of readings.

25. Shankman, Florence V. Successful Practices in Remedial Reading. Englewood Cliffs, N. J.: Prentice Hall, Inc., 1963.

A very practical and realistic sixty-three page pamphlet. It is full of specific suggestions for classroom activities, drills, and exercises. It contains the full range of information on diagnosis, testing, planning the reading program, materials, and evaluation. The author assumes a separate developmental reading program, perhaps under the auspices of the English department, rather than a schoolwide program.

26. Strang, Ruth. Reading Diagnosis and Remediation. Newark, Delaware: International Reading Association, 1968.

This book is a readable and concise introduction to the problem of diagnosing reading problems and planning their remediation. The contents cover correlates and causes of reading achievement and disability, severe reading disabilities, diagnostic techniques, (for individuals and special groups), and remediation of reading disabilities. A final section discusses trends, needs, and future directions in diagnosis of reading problems.

27. Weiss, M. Jerry. Reading in the Secondary Schools. New York: The Odyssey Press, Inc., 1961.

An anthology intended for use as a text in a reading course for secondary teachers, this book contains forty articles of a general or practical nature, rather than research reports. They cover a wide range of topics, including the best selection of articles available on teaching reading in the content fields -- science, English, mathematics and social science.

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SAMPLE OF TRADE BOOKS USED IN CONTENT READING PROJECT AT JUNIOR HIGH SCHOOL LEVEL[1]

ART

Christensen, Erwin O. Pictoral History of Western Art. NAL, 1964. 468 pp. $1.50

Gasser, Henry. Guide to Painting. Golden, 1964. 157 pp. $1.25.

_____, How to Draw & Paint. Dell, 1968. 240 pp.

Hunter, Samuel, ed. Modern American Painting & Sculpture. Dell, 1959. 256 pp. 95¢.

Miller, Thomas & Wyatt Brummitt. This Is Photography: Its Means & Ends, rev. ed. Doubleday, 1956. 155 pp. $1.00

Newmeyer, Sarah. Enjoying Modern Art. NAL. 95¢

Zim, Herbert S. et al. Photography. Golden, 1964. $1.25 Gr. 4-7.

BIOGRAPHY

Bates, Arthur. Cromwell, based on the screenplay by Ken Hughes. Popular, 1970. 125 pp. 75¢.

Born, Franz. The Man Who Invented the Future: Jules Verne. SBS, 1963. 143 pp. 50¢ Gr. 5 up.

Bortstein, Larry. Superjoe: The Joe Namath Story. Tempo 1969. 246 pp. 95¢.

Brown, Marion Marsh & Ruth Crone. Silent Storm. WSP, 1963. 244 pp. 50¢ Gr. 6 up.

Burgess, Alan. Inn of Sixth Happiness. Bantan, 1957. 199 pp. 60¢.

Carr, William H.A. JFK: A Complete Biography, 1917-1963. Lancer, 1963. 255 pp.

Clark, Glenwood G. Thomas Alva Edison. Berkley. 127 pp. Gr. 5-8.

Colver, Anne. Florence Nightingale. Dell, 1961. 50¢ Gr. 1-7.

Daley, Arthur. Pro Football's Hall of Fame. Tempo, 1963. 182 pp. 75¢.

Daugherty, James. Their Weight in Wildcats. Avon, 1936. 215 pp.

Dooley, Thomas A. Edge of Tomorrow. NAL, 1964. 144 pp. Gr. 9 up.

Gerson, Noel B. Kit Carson: Folk Hero & Man. Doubleday, 1964. 255 pp. 60¢.

Golf Digest Magazine Editors. Arnold Palmer, rev. ed. Tempo, 1970. 159 pp. 75¢.

Graham, Shirley & George D. Lipscomb. Dr. George Washington Carver. WSP, 1967. 60¢ Gr. 6-9.

Gunther, John. Death Be Not Proud: A Memoir. H&R, 1949. 161 pp. 60¢.

Hatch, Alden. Young Ike. WSP, 1969. 129 pp. 50¢ Gr. 4-6.

Horgan, Paul. Citizen of New Salem. Avon, 1961. 121 pp. 60¢ Gr. 7 up.

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[1] Trade books listed in this section are a sample of books in content areas of the curriculum. All of these books were selected by Content Reading Specialists for use in their junior high school classes.

[2] Full names and addresses of publishers are listed at the end of chapter three, pp. 29-31.

BIOGRAPHY (cont'd)

Kane, Joseph N. Facts About the Presidents, rev. ed. Picket, 1968. 504 pp. 75¢.

Kelen, Betty. Gautama Buddha, in Life & Legend. Avon, 1967. 191 pp. 75¢ Gr. 7 up.

Keller, Helen. Story of My Life. Lancer, 1968. 525 pp. 75¢ Gr. 7 up.

Komroff, Manuel. Marco Polo. WSP, 1952. 201 pp. 60¢ Gr. 6-9.

Kosterina Nina. Diary of Nine Kosterina. Avon, 1968. 188 pp. 75¢ Gr. 7 up.

Kramer, Freda. Glen Campbell Story. Pyramid, 1970. 125 pp. 75¢.

Kremgold, Joseph. Henry 3. Wsp, 1967. 259 pp. 75¢ Gr. 7 up.

Lee, Bruce. JFK: Boyhood to White House. Fawcett, 1964. 160 pp. 75¢.

Levine, I. E. Young Man in the White House: John Fitzgerald Kennedy. WSP, 1964. 242 pp. 60¢ Gr. 6-9.

Sandburg, Carl. Abraham Lincoln: The Prairie Years & the War Years, 3 vols. Dell. 75¢ each, $2.95 set.

Schoor, Gene. Jim Thorpe Story: America's Greatest Athlete. WSP, 1951. 187 pp. 60¢ Gr. 6-9.

_____. Story of Ty Cobb: Baseball's Greatest Player. WSP, 1952. 217 pp. 60¢ Gr. 6-9.

Sterling, Dorothy. Captain of the Planter: The Story of Robert Smalls. WSP, 1968. 259 pp. 50¢ Gr. 6-9.

Teale, Edwin Way. Dune Boy. Bantam, 1957. 183 pp. 60¢ Gr. 5-8.

Webb, Robert N. How & Why Wonder Book of Florence Nightingale. Wonder, 1962. 48 pp. 59¢ Gr. 4-6.

Winwar, Frances. Elizabeth: The Romantic Story of Elizabeth Barrett Browning. Avon, 1957. 157 pp. 50¢ Gr. 7-9.

DRAMA

Clurman, Harold, ed. Famous American Plays of the Nineteen Thirties. Dell. 95¢.

Kaufman, William I., ed. Great Television Plays. Dell, 1969. 75¢

Kozelka, Paul, ed. Fifteen American One-Act Plays. WSP. 75¢

Mersand, Joseph E., ed. Three Comedies of American Family Life. WSP. 75¢.

Olfson, Lewy, ed. Fifty Great Scenes for Student Actors. Bantam, 1970. 318 pp. 95¢.

Swire, Willard. Three Distinctive Plays About Abraham Lincoln. WSP, 1961. 208 pp. 60¢.

Vidal, Gore, ed. Best Television Plays. Ballantine. 50¢.

FOREIGN LANGUAGES

Adams, John. Teach Yourself German. Fawcett, 1969. 75¢.

Adams, John & N. Scarlyn Wilson. Teach Yourself French. Fawcett, 1969. 223 pp. 75¢.

De Onis, Harriet, ed. Spanish Stories & Tales. WSP, 1968. 289 pp. 60¢

Flores, Angel, ed. Great Spanish Short Stories. Dell. 60¢.

FOREIGN LANGUAGES (cont'd)

Richards, Ivor A. et al. eds. German Through Pictures. WSP, 1968. 254 pp. 75¢.
_____. French Through Pictures. WSP, 1950. 270 pp. 75¢.
_____. First Workbook of Spanish. WSP, 1960. 247 pp. 75¢.
_____. Spanish Through Pictures, Book I. WSP, 1950. 271 pp. 75¢.
_____. Second Workbook of Spanish. WSP, 1969. 310 pp. 75¢.
Wilson, N. Scarlyn. Teach Yourself Spanish. Fawcett, 1969. 240 pp. 95¢.

HOME ARTS

Berg, Gertrude e. & Myra Waldo. Molly Goldberg Jewish Cookbook. Doubleday, 1970. 185 pp.
Cramer, Polly. Polly's Homemaking Pointers. Berkley, 1965. 210 pp.
Heloise. Heloise's Housekeeping Hints. Pocket, 1962. 167 pp. 75¢.
Kaufman, William I. Easy Can Opener Cookbook. Pyramid, 1969. 160 pp. 75¢
_____. New Blender Cookbook. Pyramid, 1969. 176 pp.
_____. Recipes from the Caribbean & Latin America. Dell, 1969. 75¢.
_____. Sugar-Free Cookbook. Doubleday, 1964. 95¢.
Lee, Jimmy. Soul Food Cookbook. Award, 1970. 152 pp. 75¢.
Maddox, Marguerite. Complete Book of Knitting & Crocheting. Pocket, 1965. 260 pp. 75¢.
Post, Emily. Pocket Book of Etiquette. Pocket, 1967. 495 pp. 95¢.
Rhea, Mini & Francis S. Leighton. Sew Simply, Sew Right. Paperback, 1969. 223 pp.
Waldo, Myra. Complete Meals in One Dish. Fawcett, 1965. 288 pp. 75¢.
West, Ruth. Teen-Age Diet Book, rev. ed. Bantam, 1969. 189 pp. 75¢ Gr. 7 up.

INDUSTRIAL ARTS

Barr, Donald. How & Why Wonder Book of Building. Wonder, 1964. 48 pp. 59¢ Gr. 4-6.
Burlingame, Roger. Machines That Build America. NAL, 1953. 168 pp. 75¢.
Notkin, Jerome J. & Sidney Gulkin. How & Why Wonder Book of Electricity. Wonder, 1960. 48 pp. 59¢ Gr. 4-6.
_____, How & Why Wonder Book of Machines. Wonder, 1960. 48 pp. 59¢ Gr. 4-6.
Scharff, Robert. How & Why Wonder Book of Robots & Electronic Brains. Wonder, 1963. 48 pp. 59¢ Gr. 4-6.
_____. How & Why Wonder Book of Ships. Wonder, 1963. 48 pp. 59¢ Gr. 4-6.

LANGUAGE ARTS

Abell, Elizabeth. Champion with a Knife. Pyramid, 1970. 160 pp.
Alcock, Gudrun. Run, Westy, Run. WSP, 1968. 118 pp. 50¢.

LANGUAGE ARTS (Cont'd)

Alexander, Lloyd. Taran Wanderer. Dell, 1967. 272 pp. 95¢.
Allan, Mabel Esther. The Sign of the Unicorn. Pyramid, 1963. 125 pp. 50¢.
Anderson, Neil. Meet Sandy Smith. WSP, 1954. 150 pp. 50¢.
Arnothy, Christine. I Am Fifteen--And I Don't Want To Die. . . . SBS, 1956. 126 pp. 50¢.
Arthur, Ruth M. Portrait of Margarita. SBS, 1968. 176 pp. 60¢.
Ashford, Jeffrey. Grand Prix Monaco. Berkley, 1968. 127 pp.
Bagnold, Enid. National Velvet. SBS, 1953. 252 pp. 60¢.
Baker, Rachel. America's First Trained Nurse: Linda Richards. WSP, 1959. 198 pp. 60¢.
Bawden, Nina. Three on the Run. WSP, 1968. 264 pp. 60¢.
Benson, Sally. Junior Miss. WSP, 1941. 149 pp. 50¢.
Berger, Eric, ed. Best Short Stories. SBS, 1958. 183 pp. 60¢.
Bernanos, Michel. Other Side of the Mountain, Elain P. Halperin, trans. Dell, 1968. 127 pp. 95¢.
Bosworth, J. Allan. White Water, Still Water. WSP, 1966. 170 pp. 50¢.
Burroughs, Edgar Rice. Beasts of Tarzan. Ballantine, 1969. 159 pp. 50¢.
_____. Jungle Tales of Tarzan. Ballantine, 1963. 191 pp. 50¢.
_____. Return of Tarzan. Ballantine, 1969. 221 pp. 50¢.
_____. Son of Tarzan. Ballantine, 1963. 222 pp. 50¢.
_____. Tarzan & the Ant Men. Ballantine, 1963. 188 pp. 50¢.
_____. Tarzan & the Golden Lion. Ballantine, 1963. 191 pp. 50¢.
_____. Tarzan & the Jewels of Opar. Ballantine, 1963. 158 pp. 50¢.
_____. Tarzan & the Lost Empire. Ballantine, 1963. 159 pp. 50¢.
_____. Tarzan of the Apes. Ballantine, 1966. 245 pp. 50¢.
_____. Tarzan the Terrible. Ballantine, 1963. 217 pp. 50¢.
Butler, Beverly. Light a Single Candle. WSP, 1971. 217 pp. 60¢.
Butterworth, W. E. Susan & Her Classic Convertible. SBS, 1970. 190 pp.
Calhoun, Mary. Katie John. SBS, 1960. 128 pp. 50¢.
Carlsen, Ruth Christoffer. Mr. Pudgins. SBS, 1951. 154 pp. 45¢.
Carlsen, Ruth Christoffer & G. Robert Carlsen, eds. Great Auto Race & Other Stories of Men & Cars. SBS, 1965. 124 pp. 35¢.
Catherall, Arthur. Strange Intruder. WSP, 1965. 630 pp. 50¢.
Cavanna, Betty. Accent on April. Berkley, 1954. 144 pp. 50¢.
_____. Almost Like Sisters. Berkley, 1963. 176 pp. 50¢.
_____. Angel on Skis. Berkley, 1957. 158 pp. 50¢.
_____. Boy Next Door. Berkley, 1956. 158 pp. 50¢.
_____. Diane's New Love. Berkley, 1955. 127 pp. 50¢.
_____. Fancy Free. Berkley, 1961. 144 pp. 50¢.
_____. Love, Laurie. Berkley, 1953. 140 pp. 50¢.
_____. Mystery at Love's Creek. Berkley, 1965. 143 pp. 50¢.
_____. Passport to Romance. Berkley, 1955. 154 pp. 50¢.
_____. Scarlet Sail. Berkley, 1959. 142 pp. 50¢.
_____. Six on Easy Street. Berkley, 1958. 143 pp. 50¢.
_____. Time for Tenderness. Berkley, 1962. 142 pp. 50¢.
_____. Toujours Diane. Berkley, 1957. 128 pp. 50¢.

LANGUAGE ARTS (Cont'd)

Clemens, Samuel Longhorn. Mark Twain's Best: Eight Great Short Stories, Intro. by Morris Goldberger. SBS, 1962. 255 pp. 60¢.
Coombs, Charles I., ed. Adventure Stories. Pocket, 1948. 238 pp. 60¢.
Craig, Margaret Maze. It Could Happen to Anyone. Berkley, 1961. 143 pp. 60¢.
_____. Trish. Berkley, 1951. 174 pp. 50¢.
Daly, Maureen. Seventeenth Summer. WSP, 1942. 291 pp. 50¢.
Davis, Peter, ed. American Heritage Dictionary of the English Language. Dell, 1970. 820 pp. 75¢.
Dodge, Mary M. Hans Brinker or the Silver Skates, abr. ed. SBS, 1967. 224 pp.
Doyle, Arthur Conan. His Last Bow. Berkley, 1944. 191 pp. 60¢.
_____. Hound of the Baskervilles. Dell, 1964. 200 pp. 45¢.
Du Jardin, Rosamond. Boy Trouble. Berkley, 1953. 144 pp. 50¢
_____. Double Date. Berkley, 1952. 143 pp. 50¢.
_____. Marcy Catches Up. Berkley, 1952. 127 pp. 50¢.
_____. One of the Crowd. Berkley, 1961. 128 pp. 50¢.
Dunning, Stephen, ed. Mad, Sad & Glad. SBS, 1970. 160 pp. 75¢.
Emery, Anne. Dinny Gordon, Freshman. Berkley, 1959. 143 pp. 50¢.
_____. First Love, Farewell. Berkley, 1958. 125 pp. 50¢.
_____. First Orchid for Pat. Berkley, 1957. 142 pp. 50¢.
Eyerly, Jeannette. Girl Inside. Berkley, 1968. 142 pp. 60¢.
Falk, Ann Mari. Place of Her Own. SBS, 1962. 141 pp. 50¢.
Faulkner, Georgene & John Becker. Melindy's Medal. WSP, 1945. 146 pp. Gr. 3-6.
Felsen, Henry Gregor. Crash Club. Bantam, 1958. 202 pp. 60¢.
_____. Hot Rod. Bantam, 1950. 152 pp. 60¢.
_____. Road Rocket. Bantam, 1960. 215 pp. 60¢.
_____. Street Rod. Bantam, 1953. 154 pp. 60¢.
Fenton, Edward. Phantom of Walkaway Hill. WSP, 1961. 273 pp. 60¢
Friend, Ed. Coyote Gold. Tempo, 1969. 145 pp. 60¢.
Furman, Abraham L., ed. Detective Stories. Pocket, 1961. 176 pp. 50¢.
_____. Frontier Stories. Pocket, 1958. 248 pp. 50¢.
_____. Ghost Stories. Pocket, 1961. 163 pp. 50¢.
_____. Humorous Stories. Pocket, 1957. 184 pp. 50¢ Gr. 5-9.
_____. More Dog Stories. Pocket, 1963. 160 pp. 50¢.
_____. More Ghost Stories. Pocket, 1963. 152 pp. 50¢.
_____. More Horse Stories. Pocket, 1956. 230 pp. 50¢.
_____. Party-Time Stories. Pocket, 1966. 152 pp. 50¢.
_____. Rescue Stories. Pocket, 1964. 185 pp. 50¢.
_____. Romance Stories. Pocket, 1966. 174 pp. 50¢.
_____. Suspense Stories. Pocket, 1963. 179 pp. 50¢.
_____. Wild Animal Stories. Pocket, 1966. 164 pp. 50¢.
Furman, Josh, ed. Grudiron Stories. Pocket, 1950. 195 pp. 50¢.
Gage, Wilson. Big Blue Island. WSP, 1964. 146 pp. 50¢.
Gallagher, Ruth Gleeson & James Colvin. Words Most Often Misspelled & Mispronounced. WSP, 1964. 226 pp. 60¢.
Gault, William Campbell. Speedway Challenge. Berkley, 1956. 127 pp. 50¢.

LANGUAGE ARTS (Cont'd)

Gipson, Fred. Old Yeller. H&R, 1956. 117 pp. 60¢.
Goldberger, Miriam, ed. Teenager in Love. SBS, 1970. 159 pp. 60¢.
Hale, Edward Everett. Man Without a Country & Other Tales. Lancer 1968. 224 pp.
Hartwell, Nancy. Blue Ribbon Winner. Berkley, 1954. 145 pp.
Haycraft, Howard, ed. Boys' Book of Great Detective Stories, abr. ed. Berkley, 1970. 50¢.
Henry, Marguerite. Brighty of the Grand Canyon. SBS, 1953. 224 pp. 50¢ Gr. 2-9.
Henry, O. O. Henry's Short Stories. Lancer, 1968. 254 pp. 60¢.
Hersey, John. Single Pebble. Bantam, 1956. 122 pp. 60¢.
Herzog, Maurice. Annapurna. Popular, 1952. 254 pp. 75¢.
Holt, Stephen. Phantom Roan. SBS, 1949. 220 pp. 50¢ Gr. 6-9.
Hoopes, Ned E. Ali Baba & the Forty Thieves & Other Stories From the Arabian Nights. Dell, 1968. 153 pp. 75¢
Hudson, W. H. Green Mansions. Lancer, 1968. 350 PP. 60¢.
Ingles, James Wesley. Test of Valor: A Story of the Ancient Olympic Games. Tempo, 1953. 192 pp. 50¢.
Jackson, Jesse. Call Me Charley. Dell, 1945. 156 pp. 65¢.
Johnson, Annabel & Edgar Johnson. Count Me Gone. WSP, 1968. 169 pp. 75¢.
Johnston, William. Brady Bunch. Lancer, 1969. 192 pp. 60¢.
_____. Max Smart & the Ghastly Ghost Affair. Tempo, 1969. 154 pp. 60¢.
Judd, Frances K. Message in the Sand Dunes. Berkley, 1952. 158 pp.
Kantor, MacKinlay. Voice of Bugle Ann. Berkley, 1935. 126 pp. 50¢ Gr. 7 up.
Kassirer, Norma. Magic Elizabeth. SBS, 1966. 192 pp. 50¢.
Killilea, Marie L. With Love From Karen. Dell, 1963. 123 pp. 60¢ Gr. 5-9.
Knowles, John. Separate Peace. Dell, 1959. 186 pp. $1.45.
Lawrence, Jerome & Robert E. Lee. Inherit the Wind. Bantam, 1955. 115 pp. 60¢.
Lawrence, Mildred. Good Morning, My Heart. Berkley, 1957. 144 pp. 50¢ Gr. 7-9.
_____. Questing Heart. Berkley, 1959. 174 pp.
Lawton, Harry. Tell Them Willie Boy Is Here. Award, 1960. 218 pp. 75¢.
Le Fanu, Joseph Sheridan. Carmilla. SBS, 1971. 112 pp. 50¢.
Lee, Harper. To Kill a Mockingbird. Popular, 1960. 284 pp. 60¢ Gr. 10 up.
Lewis, C. S. The Lion, the Witch & the Wardrobe (Book 1 in the Chronicles of Narnia). Collier, 1950. 186 pp. 95¢.
_____. Prince Caspian (Book 2 in the Chronicles of Narnia). Collier, 1951. 216 pp. 95¢.
Lindgren, Astrid. Pippi in the South Seas. SBS, 1959. 116 pp. 45¢ Gr. 4-7.
_____. Ramus & the Vagabond. WSP, 1960. 214 pp. 50¢ Gr. 4-6.
Lofting, Hugh. Story of Doctor Dolittle. Dell, 1967. 125 pp. 60¢ Gr. 5 up.

LANGUAGE ARTS (Cont'd)

Lomask, Milton. Secret of Grandfather's Diary. WSP, 1958. 184 pp. 50¢ Gr. 4-6.
London, Jack. Sea Wolf. Lancer, 1968. 424 pp.
Marshall, Shirley E. Young American's Treasury of English Poetry: From the Early Middle Ages to the Twentieth Century. WSP, 1967. 233 pp. 75¢.
Montgomery, John, ed. Pan Book of Animal Stories. Berkley, 1964. 186 pp. 50¢ Gr. 7 up.
Moody, Ralph. Wild Country. Bantam, 1962. 250 pp.
Mowat, Farley. Dog Who Wouldn't Be. Pyramid, 1957. 160 pp. 75¢.
Moyes, Patricia. Helter-Skelter. WSP, 1968. 214 pp. 60¢ Gr. 9 up.
Murphy, Robert. Pond. Avon, 1964. 225 pp.
Nelson, Marg. Mystery at Little Squaw River. Berkley, 1963. 127 pp. 50¢.
Neufeld, John. Lisa, Bright & Dark. NAL, 1969. 143 pp. 75¢.
Newell, Hope. Cap for Mary Ellis. Berkley, 1953. 144 pp. 50¢. Gr. 7-9.
____. Mary Ellis, Student Nurse. Berkley, 1958. 157 pp. 50¢ Gr. 7-9.
North, Sterling. Rascal: A Memoir of a Better Era. Avon, 1963. 189 pp. 75¢ Gr. 5 up.
_____. So Dear to My Heart. Avon, 1947. 191 pp. Gr. 7-8.
Nurnberg, Maxwell & Morris Rosenblum. How to Build a Better Vocabulary, Intro. by Mario Pei. Popular, 1961. 382 pp. 75¢.
Oakes, Vanya. Hawaiian Treasure. WSP, 1957. 146 pp. 50¢.
O'Conner, Patrick. Black Tiger at Indianapolis. SBS, 1962. 220 pp 60¢ Gr. 7-9.
_____. Black Tiger at LeMans. Berkley, 1958. 144 pp. 50¢ Gr. 7 up.
_____. Mexican Road Race. Berkley, 1957. 144 pp. 50¢ Gr. 7-10.
Olney, Ross R. Daredevils of the Speedway, Foreword by Johnnie Parsons. Temp, 1970. 165 pp. 75¢.
Owen, Frank, ed. Mystery Stories. Pocket, 1948. 228 pp. 60¢.
Payne, Stephen. Cowboy Stories. Pocket, 1949. 247 pp. 50¢ Gr. 5-9.
Poe, Edgar Allen. Boy's Book of Great Detective Stories. Berkley, 1938. 191 pp.
Pohlmann, Lillian. Myrtle Albertina's Secret. SBS, 1956. 92 pp. 35¢.
Porter, Mark. Keeper Play. Temp, 1960. 160 pp. 50¢ Gr. 7-10.
Queen, Ellery, Jr. Brown Fox Mystery. Berkley, 1948. 158 pp.
_____. Golden Eagle Mystery. SBS, 1942. 200 pp. 50¢.
_____. White Elephant Mystery. Berkley, 1950. 159 pp. 50¢.
Richard, Adrienne. Pistol. Dell, 1969. 192 pp. 75¢.
Rose, Karen. There is a Season. Avon, 1967. 126 pp. 60¢ Gr. 5-6.
Rosmond, Babette, ed. Seventeen's Stories. Pyramid, 1958. 176 pp.
Sachs, Marilyn. Veronica Ganz. WSP, 1970. 60¢ Gr. 4-7.
Saroyan, William. Man with the Heart in the Highlands & Other Stories. Dell, 1968. 221 pp. 50¢ Gr. 7 up.
_____. My Name Is Aram. Dell, 1967. 156 pp. 60¢ Gr. 7 up.
Schaefer, Jack. Canyon. Bantam, 1953. 121 pp.
Scott, Jack Denton. Duluth Mongoose. Avon, 1965. 159 pp. 60¢.
Sherburne, Zoa. Almost April. SBS, 1961. 156 pp. 50¢.
_____. Girl Who Knew Tomorrow. SBS, 1970. 174 pp. 60¢.

LANGUAGE ARTS (Cont'd)

Skinner, Cornelia Otis & Emily Kimbrough. Our Hearts Were Young & Gay. Bantam, 1942. 197 pp. 60¢.
Smith, Betty. Tree Grows in Brooklyn. H&R, 1947. 430 pp. 95¢.
Smith, Vian. Tall & Proud. WSP, 1966. 179 pp. 60¢.
Sobol, Donald J. Two-Minute Mysteries. SBS, 1967. 160 pp. 50¢ Gr. 7 up.
Southall, Ivan. Hills End. WSP, 1962. 294 pp. 50¢ Gr. 6-9.
Speevack, Yetta. Spider Plant. WSP, 1969. 153 pp.
Sponsel, Heinz. Keeper of the Wild Bulls, WSP, 1962. 120 pp. 50¢.
Stanger, Margaret A. That Quail, Robert. Fawcett, 1966. 126 pp. 60¢.
Stevenson, William. Bushbaby. Bantam, 1965. 213 pp. 75¢ Gr. 4-6.
Stewart, Mary. Moon-Spinners. Fawcett, 1962. 223 pp. 75¢.
Stolz, Mary. Rosemary. Dell, 1955. 50¢ Gr. 6 up.
Stratton, Chris. Then Came Bronson #3: Rock! Pyramid, 1970. 188 pp. 75¢.
Sutton, Margaret. Seven Strange Clues. G&D, 1932. 156 pp. $1.50 Gr. 6-9.
Thomas, David, ed. Dog Stories. Pocket, 1964. 245 pp. 50¢ Gr. 5-9.
_____. Horse Stories. Pocket, 1950. 50¢ Gr. 5-9.
Tolkien, J. R. R. The Fellowship of the Ring (the first part of The Lord of the Rings). Ballantine, 1965. 527 pp. 95¢.
Travers, Pamela L. I Go by Sea, I Go by Land. Dell, 1964. 65¢ Gr. 3-7.
Treece, Henry. Splintered Sword. Avon, 1965. 135 pp. Gr. 6-9.
Tyler, Anne. Tin Can Tree. Bantam, 1965. 188 pp.
Untermeyer, Louis, ed. Story Poems: An Anthology of Narrative Verse. WSP, 1945. 119 pp. 95¢.
Warner, Rex. Men & Gods. Avon, 1951. 223 pp.
Weber, Lenora Mattingly. Beany Has a Secret Life. Berkley, 1955. 176 pp. 50¢ Gr. 7-11.
_____. Beany Malone. Berkley, 1948. 143 pp. 50¢ Gr. 7-9.
_____. Don't Call Me Katie Rose. Berkley, 1964. 196 pp. 50¢ Gr. 7-9.
_____. Meet the Malones. Berkley, 1943. 160 pp. 50¢ Gr. 7-9.
Wilder, Thornton. Bridge of San Luis Rey. WSP, 1955. 186 pp. 75¢ Gr. 10 up.
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Steinbeck, John Moon Is Down. Bantam, 1942. 115 pp. 75¢.
Sutcliff, Rosemary. Shield Ring. Dell, 1966. 252 pp. 50¢ Gr. 6-10.
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1. Ace
   Ace Publishing Corp.
   1120 Ave. of The Americas,
   New York, N.Y. 10036

2. AEP
   American Education Publications
   Xerox Education Group
   Education Ctr.
   Columbus, Ohio 43216

3. Award
   Award Books. Imprint of Universal
   Publishing and Distributing Corp.
   235 E. 45th St.
   New York, N.Y. 10017

4. Ballantine
   Ballantine Books, Inc.
   101 Fifth Ave.
   New York, N.Y. 10003

5. Bantam
   Bantam Books, Inc.
   666 Fifth Ave.
   New York, N.Y. 10019

6. Berkeley
   Berkeley Publishing Corporation
   200 Madison Ave.
   New York, N.Y. 10016

7. Collier
   Collier Books. Imprint of Macmillan Company:
   Subs. of Crowell Collier & Macmillan, Inc.
   866 Third Ave.
   New York, N.Y. 10022

8. Cornerstone
   Cornerstone Library, Inc.
   Orders to Simon & Schuster, Inc.
   630 Fifth Ave.
   New York, N.Y. 10020

9. Doubleday
   Doubleday & Company, Inc. Orders to
   501 Franklin Ave.
   Garden City, N.Y. 11530

10. Dutton
    Dutton, E.P., & Co., Inc.
    201 Park Ave., S.
    New York, N.Y. 10003

11. Falcon
    Falcon Books
    Box 8
    Riderwood, Md. 21139

12. Fawcett
    Fawcett World Library
    67 W. 44th St.
    New York, N.Y. 10036

13. Golden
    Golden Press. Imprint of Western Publishing Co.
    See #29 below.

14. Grosset & Dunlap
    Grosset & Dunlap, Inc.
    51 Madison Ave.
    New York, N.Y. 10010

15. Harper & Row
    Harper & Row Publishers, Inc.
    49 E. 33rd St.
    New York, N.Y. 10016
    Orders to Scranton, Pa. 18512

16. HR&W
    Holt, Rinehart & Winston, Inc.
    (Subs. of Columbia Broadcasting System)
    383 Madison Ave.
    New York, N.Y. 10017

17. Lancer
    Lancer Books, Inc.
    1560 Broadway
    New York, N.Y. 10036

18. NAL
    New American Library
    Imprint of World Publishing Company (Sub. of Times Mirror Company)
    110 E. 59th St.
    New York, N.Y. 10002

19. Noble
    Noble & Noble, Publishers, Inc.
    750 Third Ave.
    New York, N.Y. 10017

20. Paulist
Paulist-Newman Press
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Paramus, N.J. 07652

21. Pocket
Pocket Books, Inc.
Orders to Simon & Schuster, Inc.
1 W. 39th St.
New York, N.Y. 10018

22. Popular
Popular Library, Inc.
(Subs. of Perfect Film and Chemical Corp.)
355 Lexington Ave.
New York, N.Y. 1-017

23. Pyramid
Pyramid Publications, Inc.
444 Madison Ave.
New York, N.Y. 10022

24. RD

Reader's Digest Services, Inc.
(Div. of Education Div. of Reader's Digest Assn.)
Educational Div.
Pleasantville, N.Y. 10570

25. SBS
Scholastic Book Services,
Div. of Scholastic Magazines
50 W. 44th St.
New York, N.Y. 10036

26. Signet
Signet Books.
Imprint of New American Library
1301 Ave. of the Americans
New York, N.Y. 10019

27. Tempo
Tempo Books.
Imprint of Grosset & Dunlap, Inc.
See #14 above.

28. WSP
Washington Square Press, Inc.
Orders to Simon & Schuster.
See #21 above.

29. Western
    Western Publishing Co.
    Orders to Golden Press, Inc.
    1220 Mound Ave.
    Racine, Wis. 53404

30. Winthrop
    Winthrop Publishers, Inc.
    (Subs. of Prentice-Hall, Inc.)
    17 Duster St.
    Cambridge, Mass. 02138

31. Wonder
    Wonder-Treasure Books, Inc.
    Orders to Grosset & Dunlap, Inc.
    See #14 above.

32. Zenith
    Zenith Books.
    Imprint of Doubleday & Company
    See #9 above.

APPENDIX II

STATISTICAL ANALYSIS OF THE DATA

Each hypothesis tested in this study is stated below, followed by a brief description of the sample, and test data. All the results of the analysis of covariance design for testing these hypotheses were not statistically significant.

Hypothesis One

A. Teachers specifically trained in teaching reading in the content areas will significantly improve the reading achievement of their students as compared with a control group.

Sample Description and Test Results

Group	Reading Achievement				
		Pretest		Posttest	
	Sample Size	Mean Raw Score	Standard Deviation	Mean Raw Score	Standard Deviation
Experimental	642	77.55	24.35	86.59	27.39
Control	172	72.35	24.26	81.15	28.36

Results

Analysis of covariance revealed that the results for the F test for the degrees of freedom (1, 809)=0.180 . This result was not statistically significant at the .05 level. Consequently the null hypothesis was tenable: students taught by the reading content specialists did not improve significantly in reading achievement when compared with the control group.

Hypothesis One

B. Teachers specifically trained in teaching reading in the content areas will significantly improve the attitudes of their students as compared with a control group.

The Carter Study Methods Test, used for assessing "Attitudes Towards School" has a verification scale. This scale tends to identify those students who "desire to fake an unduly favorable score," omit items, or are indiscriminate or careless in marking responses. In testing the hypothesis, those students whose verification score fell below the critical level on the scale were eliminated from each design for testing hypotheses on change in attitudes toward school.

Sample Description and Test Results

Group

		Pretest		Posttest	
	Sample Size	Mean Raw Score	Standard Deviation	Mean Raw Score	Standard Deviation
Experimental	499	32.34	7.02	30.84	7.49
Control	80	32.83	6.61	30.87	7.5

F (1,576)=0.15 For p (.05), results are not statistically significant

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The analysis of covariance design indicated that the F test for the degrees of freedom (1,576) = 0.15 . This result was not statistically significant at the .05 level. Hence, the null hypothesis was tenable: there was no statistically significant difference in attitudes, as assessed by the Carter Study Methods Test, Scale I, Attitudes Towards School, between the experimental and control groups.

Hypothesis One

C. The "Interest Inventory" responses, as assessed on the Athey-Holmes-Singer Reading-Personality Scale, will not significantly differentiate the experimental and control groups.

Sample Description and Test Results

Group		Pretest		Posttest	
	Sample Size	Mean Raw Score	Standard Deviation	Mean Raw Score	Standard Deviation
Experimental	573	29.00	4.7	30.78	4.66
Control	20	27.89	3.83	28.49	4.67

F (1, 590) = 3.32 For p (.05), the results are not statistically significant

---

Hypothesis Two

A. Ethnic groups taught by reading content specialists will differ significantly in reading achievement from ethnic groups taught by control group teachers.

Sample Description and Test Results

Group		Pretest		Posttest	
	Sample Size	Mean Raw Score	Standard Deviation	Mean Raw Score	Standard Deviation
Experimental					
Anglo	507	81.93	23.29	91.52	26.02
Black	73	61.31	20.89	69.58	22.57
Chicano	67	63.25	22.10	69.58	27.87
Control					
Anglo	134	76.91	24.00	86.69	27.46
Black	20	51.39	13.97	55.64	19.88
Chicano	16	61.74	20.09	70.12	24.84

F (5, 810) = 1.87 For p (.05), results are not statistically significant.

Hypothesis Two

B. Ethnic groups taught by reading content specialists will not differ significantly in attitudes toward school as compared with ethnic groups taught by control group teachers.

Sample Description and Test Results

Group	Pretest		Posttest	
	Sample Size	Mean Raw Score	Standard Deviation	Mean Raw Score	Standard Deviation
Experimental					
Anglo	412	32.54	7.07	31.08	7.38
Black	44	30.99	5.94	30.11	7.20
Chicano	41	31.51	7.4	28.78	8.37
Control					
Anglo	67	32.95	6.43	30.71	7.65
Black	8	31.75	4.39	29.62	5.73
Chicano	5	33.00	12.02	35.00	7.81

F (5,570)= 1.08 for p (.05) results are not statistically significant

Hypothesis Two

C. Ethnic groups in the experimental treatment as compared with Anglos in the control group would differ significantly in "Attitudes Toward School" as assessed by the Carter Study Methods Test.

Sample Description and Test Results

Group	Pretest		Posttest	
	Sample Size	Mean Raw Score	Standard Deviation	Mean Raw Score	Standard Deviation
Experimental					
Anglo	453	29.46	4.60	31.03	4.56
Black	62	27.87	4.21	29.17	5.18
Chicano	58	28.36	6.20	30.51	4.58
Control					
Anglo	20	27.89	3.83	28.49	4.67

F (3, 588) = 2.62 For p (.05) the results are not statistically significant

Hypothesis Three

A. One of the motivations for conducting this experimental study was to determine whether the reading performance of students in the Riverside School Study could be modified as a result of instruction from reading content specialists. However, only a small number of students from the Riverside School Study were in the schools taught by the reading content specialists. Nevertheless, the performances of these students were compared. The hypothesis was that Blacks and Chicanos who were progressively diverging in reading achievement with successive years in school would begin to converge under instruction from reading content specialists.

Note well that only those students whose verification scores on the Carter Study Methods Test was above the critical level were used in testing hypotheses 3a and 3b.

Sample Description and Test Results

Group		Pretest	Posttest
	Sample Size	Mean Raw Score	Mean Raw Score
Experimental			
Anglo	16	86.57	92.92
Black	6	73.33	75.50
Chicano	10	69.66	74.83

$F(2,28) = 0.23$ For p (.05) the results are not statistically different.

Hypothesis Three

B. The hypothesis tested was that the attitudes towards school of the Riverside School Study ethnic groups would

(a) be significantly different, and

(b) would be significantly modified as a consequence of instruction from the reading content specialists

Neither hypothesis (a) or (b) was tenable. These results mean that ethnically different students who have valid verification scores on the Carter Study Methods Test appear to hold comparable attitudes toward school.

Sample Description and Test Results

Group		Pretest	Posttest
	Sample Size	Mean Raw Score	Mean Raw Score
Experimental			
Anglo	16	33.07	32.42
Black	6	28.66	21.50
Chicano	10	30.33	20.50

F (2,28) = 2.75 For p (.05) the results are not statistically significant

For hypotheses four, five, and six, the samples were "purified". Only those students were used who were in the seventh grade and whose verification score on the Carter Study Methods Test was above the criteria level.

Hypothesis Four

The Reading Content Specialists ranged from a low of 51 to a high of 65 in "Attitudes Towards Teaching Reading in the Content Areas". To determine whether this variation in attitudes affected the reading achievement of their students, comparison was made between those students taught by specialists in the upper half of the scale versus those taught by specialists in the lower half of the scale.

F (1,411) = 2.40 For p (.05) the results are not statistically significant.

Hypothesis Five

Hypothesis five tested whether there was a significant interaction between teacher attitude towards teaching reading in the content area and reading achievement levels of students. For this purpose, the upper and lower 27 per cent of students were compared in the classes taught by Reading Content Specialists who contrasted in their attitudes towards teaching reading in the content areas.

Sample Description and Test Results

Group	Pretest		Posttest	
	Sample Size	Mean Raw Score	Standard Deviation	Mean Raw Score	Standard Deviation
Experimental					
Good Attitude Teachers					
-Lower 27%	50	51.57	10.35	59.63	17.30
-Upper 27%	50	109.19	8.33	116.45	14.71
Poor Attitude Teachers					
-Lower 27%	62	54.30	12.69	67.12	14.91
-Upper 27%	62	108.93	7.52	118.32	8.98

$F(3,219) = 3.20$ For p (.05) the results are not significantly significant.

Hypothesis Six

Hypothesis five was retested, but only Anglo subjects were used

Sample Description and Test Results

Group		Pretest		Posttest	
	Sample Size	Mean Raw Score	Standard Deviation	Mean Raw Scores	Standard Deviation
Anglo Experimental					
Good Attitude Teachers -Lower 27%	40	57.49	11.63	65.47	18.65
-Upper 27%	40	111.32	7.83	117.09	15.97
Poor Attitude Teachers -Lower 27%	53	58.22	12.72	71.26	15.66
-Upper 27%	53	109.99	7.12	118.35	9.47

F (3, 181) = 1.76 For p (.05) the results are not statistically significant.